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Highlights

Enrollment

Freshman engineering enrollment in the fall of 1961 totaled 67,600—almost duplicating the number enrolled in the fall of 1960, but 11,200 (or 14 percent) lower than the peak number reported in the fall of 1957.

* * *

The percentage of freshmen enrolled in engineering has steadily declined—from 18 percent of the total first-time male degree-credit enrollment in the fall of 1957 to 11 percent in the fall of 1961.

* * *

Total undergraduate engineering enrollment in the fall of 1961 was 232,000. This enrollment has decreased for four consecutive years, from a peak of 269,000 in the fall of 1957—a total 4-year decrease of 37,000, or 14 percent.

* * *

Graduate enrollments in engineering reached new peaks at all levels in the fall of 1961. Enrollment for the master's degree was 32,800—up 5 percent from the fall of 1960, and nearly double the number reported 10 years earlier. Enrollment for the doctorate was nearly 7,900—up 22 percent from the fall of 1960, and approximately 2.75 times the number reported 10 years earlier.

* * *

In the fall of 1961 approximately 86 percent of the undergraduate students in engineering were pursuing full-time programs of study.

Degrees

The number of bachelor's degrees conferred in engineering has declined for two consecutive years—from 38,100 in 1958–59 to 35,900 in 1960–61, a total decrease of 2,200, or 6 percent.

* * *

Annual increases are still being reported in the number of advanced degrees conferred in engineering. At the master's level 8,177 degrees were conferred during 1960–61—up 14 percent from the previous year, and up 59 percent in 10 years. At the doctor's level 943 degrees were conferred during 1960–61. This figure is 20 percent greater than the number reported the previous year, and 61 percent greater than the number reported 10 years earlier.

* * *

During 1960–61, as in other recent years, more degrees were conferred in electrical engineering than in any other engineering field. The number and percent conferred in electrical engineering at each level was as follows: Bachelor's level, 10,200, or 28 percent of the total; master's level, 2,350, or 29 percent of the total, and at the doctor's level 250, or 27 percent of the total.

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Engineering Enrollments and Degrees 1961

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Foreword

THIS IS THE 13th annual report on *Engineering Enrollments and Degrees* issued by the United States Office of Education. The surveys which provide the data for these reports are conducted under the joint auspices of the United States Office of Education and the American Society for Engineering Education.

The data on engineering enrollments in this series of reports are limited to enrollments in institutions of higher education which confer engineering degrees. Therefore, the present report does not include students who plan to graduate from an engineering school but who are presently enrolled in another institution, such as a junior college, or a liberal arts college (under a three-two plan).

The author was assisted by Henry H. Armsby, former Specialist for Curriculum Patterns in Engineering Education, Division of Higher Education and Harold A. Foecke, Specialist for Engineering Education, Division of Higher Education. Principal responsibility for the collection and verification of original data and preparation of tabular materials was carried by Leah W. Ramsey under the general direction of Hazel C. Poole.

It is a pleasure this year, as before, to report that the registrars of all institutions to which questionnaires were sent responded to the request for data. The Office of Education is deeply appreciative of this splendid cooperation.

RALPH C. M. FLYNT,
Associate Commissioner for
Educational Research and Development.

VIRGIL R. WALKER, *Acting Director*
Division of Educational Statistics.

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Engineering Enrollments and Degrees: 1961

Introduction

THE NATIONAL NEED FOR ENGINEERS. A study conducted by the United States Department of Labor, Bureau of Labor Statistics, for the National Science Foundation [1] indicates that the total U.S. need for engineers may almost double during the 1960's—from 782,000 [2] in 1959 to 1,484,000 in 1970. To meet this demand, it was estimated that it would be necessary to graduate about 72,000 engineers a year during the next 10 years. This presents a major challenge to the Nation's colleges and universities because both engineering enrollments and degrees at the undergraduate level have decreased in recent years.

At the close of the 1960–61 school year [3] the 13th annual survey of engineering enrollments and degrees was conducted under the joint auspices of the United States Office of Education and the American Society for Engineering Education. This survey shows that 45,000 degrees were conferred in engineering—35,900 bachelor's, 8,177 master's (and other postgraduate predoctoral) and 943 doctor's degrees. These figures indicate that the number of engineering degrees conferred during this year may be below the number needed to satisfy the estimated annual need forecast by the Bureau of Labor Statistics in its 10-year projection.

Institutions included in the survey. This survey of engineering enrollments and degrees covers 245 institutions of higher education in the aggregate United States. Throughout this report the term "aggregate United States" refers to the 50 States, the District of Columbia, and outlying parts.[4] Questionnaires were mailed to the registrars of all degree-granting institutions of higher education which reported the conferral of engineering degrees to the U.S. Office of Education in its survey of earned degrees granted during 1959–60. A 100-percent response was received from these institutions.

Accuracy of data. The reports from institutions included in this survey have been carefully examined for consistency with the previous years' returns, with the curriculums described in the institutions' catalogs (if such review appeared to be needed), and for compliance with directions accompanying the survey form. Letters were sent, as necessary, requesting verification or reconciliation of data reported by the institutions. Since data in this report represent a complete census of institutions which confer engineering degrees and a census of engineering enrollment in these institutions, and since these data have been carefully validated, totals are expressed in absolute numbers to the unit digit in the tables of this circular. However, the numbers cited in the *highlights* and the text are rounded to 3 significant figures when they are 10,000 or more. Smaller figures are expressed to the unit digit. Due cognizance should be given to the fact that this level of precision may not be applicable to all figures reported. Attention should again be called to the fact that engineering enrollments in institutions which do not confer a bachelor's or higher degree are not included in this survey. This excludes junior colleges and other institutions offering the first portion of a bachelor's degree program in engineering.

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[1] *The Long-Range Demand for Scientific and Technical Personnel* (NSF.61-65). National Science Foundation. Washington: U.S. Government Printing Office, 1961. 70 p.

[2] Figures cited in the "highlights" and text are rounded to 3 significant figures when they are 10,000 or more. Figures of less than 10,000 are expressed to the unit digit.

[3] The term "school year" refers to a 12-month period, beginning July 1 of one year and ending June 30 of the following year.

[4] Puerto Rico is the only outlying part of the aggregate United States which has a 4-year degree granting institution conferring engineering degrees.

Time schedule. Institutions were requested to report engineering enrollment as of the fall of 1961, and engineering degrees conferred between July 1, 1960 and June 30, 1961. These data were collected on two separate questionnaires—*The Survey of Engineering Enrollment: Fall of 1961* and *the Survey of Engineering Degrees Conferred Between July 1, 1960 and June 30, 1961.*

Part I of this report consists of summaries and brief discussions of data on engineering enrollments and degrees contained in the current suvey, and of their relationships to similar data in previous surveys of this series.

Part II of this report contains detailed enrollment and degree data on individual institutions and summary data by curriculum, level, and institution as supplied by the 245 institutions in the survey. Data on undergraduate enrollment and first-level degrees were reported by 242 institutions, and graduate enrollment and degrees by 152. Three of the 245 institutions reported only graduate enrollment and degrees.

Part I

Current Data and Comparisons With Previous Years

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Total Engineering Enrollment

After three consecutive years of decline, total engineering enrollment increased slightly in the fall of 1961. The substantial increase in enrollment at the graduate level over the 4-year period was large enough to more than compensate for a decrease at the undergraduate level. (See table 1.)

In the fall of 1961, total engineering enrollment was 8 percent lower than it was in the fall of 1957—the peak year for engineering enrollment. Total engineering enrollment decreased from 297,000 in the fall of 1957 to 272,000 in the fall of 1960. The following year (fall of 1961) the total increased to 273,000.

In sharp contrast to the general decline in total engineering enrollment, there was an increase of 27 percent in total degree-credit enrollment [5] in all fields of study between the fall of 1957 and 1961.

It can be seen from figure 1 that from the fall of 1950 to the fall of 1957 engineering enrollment accounted for an increasing percent of the total annual degree-credit enrollment in all fields—increasing from 8 percent of the total in the fall of 1950, to 10 percent in the fall of 1957. Since 1957, however, engineering enrollment has accounted for a decreasing percentage of the annual total degree-credit enrollment and in the fall of 1961 only 7 percent of the total degree-credit enrollment was in engineering.

[5] The term "degree-credit enrollment" designates enrollment in courses which consist wholly or principally of work which is normally creditable toward a bachelor's or higher degree either in the institution where the students are enrolled, or by transfer, as from a junior college to a 4-year institution.

Figure 1.

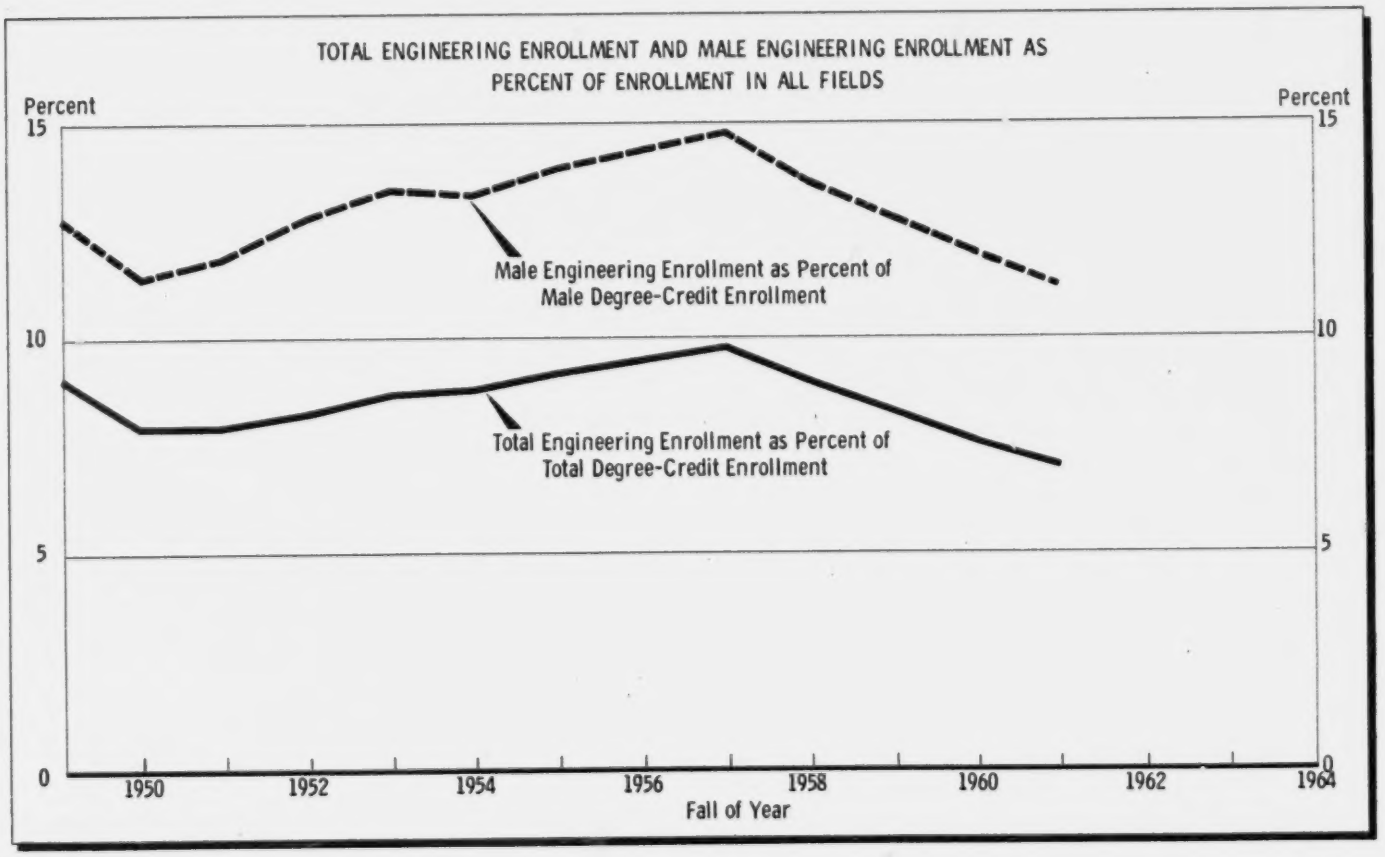

Table 1.—Total engineering enrollment, percent change from previous year, and engineering enrollment by level: Aggregate United States, fall 1949 to fall 1961

[NA=data not available]

Fall of year	Total		Level		
	Number	Percent change from previous year	First degree [1]	Master's degree [2]	Doctor's degree
1961	272, 777	0. 3	232, 104	32, 804	7, 869
1960	271, 850	−2. 3	234, 190	31, 215	6, 445
1959	278, 348	−3. 9	242, 992	29, 713	5, 643
1958	289, 680	−2. 5	256, 779	28, 138	4, 763
1957	297, 077	7. 2	268, 761	24, 136	4, 180
1956	277, 052	13. 8	251, 121	22, 529	3, 402
1955	243, 390	13. 5	221, 448	18, 779	3, 163
1954	214, 414	10. 9	193, 692	17, 441	3, 281
1953	193, 333	9. 5	171, 725	18, 607	3, 001
1952	176, 549	6. 6	156, 080	17, 539	2, 930
1951	165, 637	−8. 1	145, 997	16, 765	2, 875
1950	180, 262	−18. 0	161, 592	15, 869	2, 801
1949	219, 712	NA	201, 927	15, 242	2, 543

[1] The first-level degree is the bachelor's or first-professional degree.
[2] Includes also enrollments for other postgraduate predoctoral degrees.

Table 2.—Engineering enrollment, by sex; percent male engineering enrollment is of total male degree-credit enrollment; percent female engineering enrollment is of total female degree-credit enrollment; and percent female enrollment is of total engineering enrollment: Aggregate United States, fall 1949 to fall 1961

Fall of year	Male		Female		
	Number	Percent of total male degree-credit enrollment	Number	Percent of total female degree-credit enrollment	Percent of total engineering enrollment
1961	271, 291	11. 2	1, 486	0. 10	0. 54
1960	270, 311	11. 9	1, 539	. 11	. 57
1959	276, 686	12. 7	1, 662	. 14	. 60
1958	287, 962	13. 6	1, 718	. 15	. 59
1957	295, 294	14. 7	1, 783	. 17	. 60
1956	275, 568	14. 3	1, 484	. 15	. 54
1955	242, 223	13. 9	1, 167	. 13	. 48
1954	213, 253	13. 3	1, 161	. 13	. 54
1953	192, 407	13. 4	926	. 11	. 48
1952	175, 853	12. 7	696	. 09	. 39
1951	165, 012	11. 8	625	. 09	. 38
1950	179, 579	11. 4	683	. 09	. 38
1949	218, 949	12. 7	763	. 10	. 35

Enrollment of Men and Women

Men enrolled in engineering schools have continued to account for more than 99 percent of the total number of engineering students. It is therefore appropriate to compare the number of men enrolled in engineering curriculums with the total number of men enrolled in all degree-credit courses in institutions of higher education. (See figure 1 and table 2.)

It can be seen that, from the fall of 1950 to the fall of 1957, men enrolled in engineering curriculums accounted for an increasing percentage of the annual male degree-credit enrollment in all fields—increasing from 11 percent of the total in the fall of 1950 to 15 percent in the fall of 1957. These percentages have been decreasing since 1957, and in the fall of 1961 only 11 percent of the total male degree-credit enrollment was in engineering. Another comparison, not illustrated in the chart, disclosed a 21 percent increase in the total degree-credit enrollment of men in all fields of study from the fall of 1957 to the fall of 1961.

Special significance should be attached to the meager enrollment of women in engineering. The highest number of women enrolled in engineering was 1,783. This figure was reported in the fall of 1957 (table 2). The scarcity of women in this field suggests a source of much needed talent.

Engineering Schools and Enrollment, by Type of Control

Interest has been shown in the comparative participation of public and private institutions of higher education in engineering education. Table 3 lists the annual number of public and private institutions of higher education granting engineering degrees, as well as the annual percentages that are public and private over the period 1949–61. The table also provides the same type of percentage comparison for all public and private institutions of higher education in the aggregate United States.

A study of table 3 indicates a substantial increase in number of engineering schools over the last 13 years (a somewhat larger increase for private than public). However the important fact revealed by a consideration of table 3 data is that engineering schools, in both private and public institutions, remained at about the same proportion to the number of institutions of higher education.

From the fall of 1960 to the fall of 1961 engineering enrollment in publicly controlled institutions decreased slightly, while engineering enrollment in private institutions increased (table 4). The all-time peak engineering enrollment in public and private institutions was reached in the fall of 1957. From that time to the fall of 1961, the enrollment decreased 10 percent in the private institutions and 4 percent in the public institutions. While engineering enrollment underwent an overall decrease from the fall of 1957 to the fall of 1961, total degree-credit enrollment in all fields of study increased 32 percent in public institutions and 20 percent in private institutions.

Table 3.—Distribution of engineering schools, and all institutions of higher education, by institutional control: Aggregate United States, fall 1949 to fall 1961

[NA=data not available]

Fall of year	Engineering schools				All institutions of higher education [1]	
	Publicly controlled		Privately controlled		Percent publicly controlled	Percent privately controlled
	Number	Percent of total	Number	Percent of total		
1961	125	51.0	120	49.0	35.6	64.4
1960	121	50.4	119	49.6	35.0	65.0
1959	119	51.1	114	48.9	35.0	65.0
1958	120	53.1	106	46.9	34.9	65.1
1957	117	52.9	104	47.1	34.6	65.4
1956	116	53.5	101	46.5	34.9	65.1
1955	115	53.0	102	47.0	35.3	64.7
1954	115	52.8	103	47.2	35.3	64.7
1953	112	53.3	98	46.7	35.6	64.4
1952	104	53.6	90	46.4	34.5	65.5
1951	102	53.1	90	46.9	35.1	64.9
1950	101	53.2	89	46.8	35.0	65.0
1949	97	53.9	83	46.1	NA	NA

[1] See *Opening (Fall) Enrollment in Higher Education 1960: Analytic Report* (Circular No. 652), by Edith M. Huddleston. U.S. Department of Health, Education, and Welfare, Office of Education. Washington: U.S. Government Printing Office, 1961. 43 p.

Table 4.—Distribution of engineering enrollment and total degree-credit enrollment, by institutional control: Aggregate United States, fall 1949 to fall 1961

Fall of year	Engineering enrollment				Total degree-credit enrollment [1]	
	In publicly controlled institutions		In privately controlled institutions		Public as percent of total	Private as percent of total
	Number	Percent of total	Number	Percent of total		
1961	167,321	61.3	105,456	38.7	60.4	39.6
1960	168,491	62.0	103,359	38.0	59.2	40.8
1959	170,558	61.3	107,790	38.7	58.9	41.1
1958	180,309	62.2	109,371	37.8	58.7	41.3
1957	186,876	62.9	110,201	37.1	58.0	42.0
1956	173,094	62.5	103,958	37.5	57.1	42.9
1955	150,446	61.8	92,944	38.2	55.9	44.1
1954	129,262	60.3	85,152	39.7	55.8	44.2
1953	112,582	58.2	80,751	41.8	53.5	46.5
1952	101,076	57.3	75,473	42.7	51.8	48.2
1951	87,501	52.8	78,136	47.2	49.7	50.3
1950	98,056	54.4	82,206	45.6	50.3	49.7
1949	124,869	56.8	94,843	43.2	49.6	50.4

[1] See *Opening (Fall) Enrollment in Higher Education, 1960: Analytic Report* (Circular No. 652), by Edith M. Huddleston. U.S. Department of Health, Education, and Welfare, Office of Education. Washington: U.S. Government Printing Office. 1961. 43 p.

Undergraduate Engineering Enrollment

Undergraduate engineering enrollment increased each fall from 1951 to 1957, with an average annual increase of 11 percent. From a peak undergraduate engineering enrollment of 269,000 in the fall of 1957, enrollment has decreased each year; and in the fall of 1961, it was 232,000—a decrease of 14 percent from the fall of 1957 (table 5).

Table 5.—Undergraduate engineering enrollment, and percent change from previous year: Aggregate United States, fall 1949 to fall 1961

[NA=data not available]

Fall of year	Enrollment	Percentage change from previous year
1961	232, 104	−0. 9
1960	234, 190	−3. 6
1959	242, 992	−5. 4
1958	256, 779	−4. 5
1957	268, 761	7. 0
1956	251, 121	13. 4
1955	221, 448	14. 3
1954	193, 692	12. 8
1953	171, 725	10. 0
1952	156, 080	6. 9
1951	145, 997	−9. 7
1950	161, 592	−20. 0
1949	201, 927	NA

From the fall of 1949 to the middle 1950's the proportion of undergraduate engineering students enrolled in publicly controlled institutions increased slightly while the proportion enrolled in privately controlled institutions decreased (table 6). In the last half of the decade, the annual proportion of undergraduate engineering students enrolled in publicly controlled and privately controlled institutions has remained approximately the same—two-thirds in public institutions and one-third in private institutions.

Undergraduate engineering enrollment in publicly controlled institutions increased from a low of 79,800 in the fall of 1951 to a high of 176,000 in the fall of 1957 for an average annual increase of 20 percent. Subsequent to this peak, undergraduate engineering enrollment in publicly controlled institutions decreased each fall. In the fall of 1961 the enrollment was 148,000—a total decrease of 16 percent from the fall of 1957, or an average annual decrease of 4 percent.

Table 6.—Distribution of undergraduate engineering enrollment, by institutional control: Aggregate United States, fall 1949 to fall 1961

Fall of year	Publicly controlled institutions		Privately controlled institutions	
	Enrollment	Percent of total	Enrollment	Percent of total
1961	148, 182	63. 8	83, 922	36. 2
1960	151, 030	64. 5	83, 160	35. 5
1959	154, 345	63. 5	88, 647	36. 5
1958	165, 869	64. 6	90, 910	35. 4
1957	175, 501	65. 3	93, 260	34. 7
1956	162, 887	64. 9	88, 234	35. 1
1955	141, 314	63. 8	80, 134	36. 2
1954	120, 316	62. 1	73, 376	37. 9
1953	104, 127	60. 6	67, 598	39. 4
1952	93, 247	59. 7	62, 833	40. 3
1951	79, 849	54. 7	66, 148	45. 3
1950	90, 490	56. 0	71, 102	44. 0
1949	117, 590	58. 2	84, 337	41. 8

In privately controlled institutions, undergraduate engineering enrollment increased from a low of 62,800 in the fall of 1952 to a high of 93,300 in the fall of 1957, an average annual increase of 10 percent. For the next 3 consecutive years enrollments in this category decreased, and in 1960 there were 83,200 students enrolled—representing an average annual decrease of 4 percent. It appears that this trend may now have been reversed since 83,900 undergraduate students were enrolled in privately controlled engineering schools in the fall of 1961—an increase of 1 percent.

The number of engineering freshmen has remained at approximately the same level for three consecutive years. This apparent leveling of freshmen engineering enrollment followed 2 consecutive years in which large decreases were reported (table 7).

Since over 99 percent of all engineering students are men, a comparison of freshmen enrollments in engineering with first-time enrollments in all fields

Table 7.—Freshman engineering enrollment, percent change from previous year, and percent freshman engineering enrollment is of first-time male degree-credit enrollment: Aggregate United States, fall 1949 to fall 1961

[L=less than 0.05 percent]

Fall of year	Enrollment	Percentage change from previous year	Percent of first-time male degree credit enrollment [1]
1961	67,575	L	11.3
1960	67,556	−0.2	12.4
1959	67,704	−3.3	13.8
1958	70,029	−11.1	14.9
1957	78,757	1.3	17.7
1956	77,738	6.7	17.4
1955	72,825	11.2	17.4
1954	65,505	8.3	16.5
1953	60,478	17.1	17.5
1952	51,631	30.5	16.0
1951	39,571	15.4	14.1
1950	34,299	−18.1	10.7
1949	41,863	--------	11.7

[1] See *Opening (Fall) Enrollment in Higher Education, 1960: Analytic Report* (Circular No. 652), by Edith M. Huddleston. U.S. Department of Health, Education, and Welfare, Office of Education. Washington: U.S. Government Printing Office, 1961. 43 p.

can best be made by confining data on first-time enrollments in all fields to men students. Freshmen engineering students accounted for only 11 percent of the first-time, male, degree-credit students in all fields in the fall of 1961. This was the smallest percent that engineering freshmen have comprised of all first-time, male, degree-credit students in 10 years (table 7). The percentages shown in the last column of table 7 also indicate that freshman engineering enrollment is accounting for a decreasing percent of the annual, total, male, first-time, degree-credit enrollment in all fields of study. These percentages may not be decreasing as much as the table indicates, however, because in recent years an increasing number of institutions of higher education have adopted a policy of not classifying student enrollments by major field of study until the beginning of the student's junior year. This is probably less true in the crowded engineering curriculums than in other major fields of study, but it probably does account for some of the decreases. Also, many institutions encourage freshmen and sophomore students to enroll in broad, general, "nonpreference" curriculums until a sound vocational choice has been made. The Office of Education is observing these trends carefully, and if an institution reports a large change in its freshman and sophomore engineering classes from one year to the next the Office ascertains the reason for the change. If the change is caused by a reclassification of students from engineering to "unclassified," the institution is requested to estimate the number of unclassified students who may be working toward an engineering degree. This keeps the freshman and sophomore engineering enrollment figures from showing large decreases attributable to a reclassification of students from engineering in one year to "unclassified" the following year. It is more difficult to predict the number of "nonpreference" undergraduates who may make a vocational choice of engineering.

The decrease in undergraduate engineering enrollment is not limited to the freshmen and sophomore classes. Table 8 shows that in recent years there also have been some sizeable decreases in the third- and fourth-year enrollments.

Table 8.—Second- to fifth-year undergraduate engineering enrollment: Aggregate United States, fall 1949 to fall 1961

Fall of year	2d-year	3d-year	4th-year	5th-year [1]
1961	48,692	39,149	39,307	4,231
1960	46,726	40,133	41,369	4,260
1959	47,987	43,739	43,189	4,211
1958	53,457	47,189	44,433	4,131
1957	56,488	48,384	42,594	3,903
1956	55,769	44,610	37,571	3,225
1955	50,841	39,377	31,300	2,808
1954	44,074	32,341	25,547	2,694
1953	37,046	26,792	24,158	2,625
1952	30,219	25,011	25,964	3,065
1951	26,741	27,545	30,722	3,214
1950	30,915	34,423	41,702	3,514
1949	39,558	46,077	55,698	2,664

[1] Includes 5th year of a 5-year curriculum and 5th year of a cooperative program.

From the fall of 1949 to the fall of 1957 increasing percentages of undergraduate engineering students pursued part-time and evening courses. Since 1957, however, these percentages have remained about the same (table 9).

Table 9.—Number and percent of engineering undergraduates in part-time and evening courses: Aggregate United States, fall 1949 to fall 1961

Fall of year	Enrollment	Percent of total undergraduate engineering enrollment
1961	33, 150	14. 3
1960	34, 146	14. 6
1959	36, 162	14. 9
1958	37, 531	14. 6
1957	38, 635	14. 4
1956	32, 208	12. 8
1955	24, 297	11. 0
1954	23, 531	12. 1
1953	20, 626	12. 0
1952	20, 190	12. 9
1951	18, 204	12. 5
1950	16, 739	10. 4
1949	16, 067	8. 0

Table 10.—Estimated retention rates of undergraduate engineering students: Aggregate United States, fall 1950 to fall 1961

[NA=data not available]

Fall of year	2d-year enrollment as percent of freshmen of previous year	3d-year enrollment as percent of 2d-year of previous year	4th-year enrollment as percent of 3d-year of previous year	1st-level degrees as percent of—	
				Seniors [1] at beginning of school year	Freshmen [2] 3 years earlier
1961	72. 1	83. 8	97. 9	--------	--------
1960	69. 0	83. 6	94. 6	86. 6	45. 5
1959	68. 5	81. 8	91. 5	87. 6	48. 6
1958	67. 9	83. 6	91. 8	86. 0	52. 4
1957	72. 7	86. 8	95. 5	83. 4	53. 9
1956	76. 6	87. 7	95. 4	84. 6	51. 6
1955	77. 6	89. 3	96. 8	85. 2	51. 0
1954	72. 9	87. 3	95. 4	88. 8	57. 1
1953	71. 8	88. 7	96. 6	92. 3	64. 8
1952	76. 4	93. 5	94. 3	91. 5	57. 7
1951	78. 0	89. 1	89. 2	98. 1	NA
1950	73. 8	87. 0	90. 5	99. 7	NA

[1] Includes students (except part-time and evening students) normally expected to earn a first-level degree in engineering by the end of the academic year. For the 1960–61 academic year, seniors are estimated as including all 5th-year students in the fall of 1960, plus all 4th-year students in the fall of 1960 minus that portion of these 4th-year students who will go on to the 5th year of a 5-year curriculum; this latter number is estimated as equal to the number of 5th-year students in the fall of 1961.

[2] Part-time and evening freshmen not included.

Undergraduate Engineering Student Retention

A study of data on undergraduate engineering enrollment (tables 7 and 8) and first-level degrees conferred (table 17) suggests trends in student retention. It also provides a basis for estimating from enrollment data future additions to the trained manpower supply of engineers.

The figures from the above-mentioned tables were used to prepare table 10 which shows the estimated retention rates of undergraduate engineering students. Data in columns 2–4 of the table reveal that from the middle to the late 1950's the retention rates of undergraduate engineering students were declining, but that beginning in 1959 the retention rates began to show signs of improvement. Improvement was first observed by the data in column 2 and later in columns 3 and 4. In 1961, it was stlll too early for such improvement to be reflected in column 6 of table 10. Even with such improvement, it will probably be at least 3 or 4 years before the number of bachelor's degrees conferred in engineering exceeds the number conferred during the school year ending in 1961. This is because there was a large decrease in freshman engineering enrollment in the years subsequent to 1957, which was the freshman year for those receiving the bachelor's degree in engineering for the school year ending in 1961.

Engineering Enrollment for the Master's Degree

Enrollments for the master's and other predoctoral engineering degrees have nearly doubled in the last 10 years and in the fall of 1961 there were 32,800 students enrolled in engineering curriculums at this level (see table 11). Enrollments at the master's and predoctoral level also have increased for 7 consecutive years.

In the discussion of undergraduate engineering enrollments it has been noted that approximately two-thirds of the students are in publicly controlled institutions. At the master's level the proportions are very different. Fewer than half (46 percent) of the engineering students studying for a master's degree are in publicly controlled institutions. However, the trend during the last decade has been toward an increasing proportion of such students to enroll in publicly controlled institutions (table 12).

Table 11.—Engineering enrollment for the master's degree,[1] and percent change from the previous year: Aggregate United States, fall 1949 to fall 1961

[NA = data not available]

Fall of year	Enrollment	Percentage change from previous year
1961	32, 804	5. 1
1960	31, 215	5. 1
1959	29, 713	5. 6
1958	28, 138	16. 6
1957	24, 136	7. 0
1956	22, 529	20. 0
1955	18, 779	7. 7
1954	17, 441	−6. 3
1953	18, 607	6. 1
1952	17, 539	4. 6
1951	16, 765	5. 6
1950	15, 869	4. 1
1949	15, 242	NA

[1] Includes also enrollment for the postgraduate predoctoral degree of engineer.

In the fall of 1961, 14,400 students were enrolled in evening classes for the master's or other predoctoral degrees in engineering. This is the largest number of students ever enrolled in evening classes for an engineering degree at this level. The annual trend from the fall of 1951 to the fall of 1960 was for a decreasing percent of engineering students at this level to be attending evening classes. However, the trend may now have reversed itself since there was an increase in the proportion of students enrolled in evening classes for the fall of 1961 (table 13).

Table 12.—Distribution of engineering enrollment for the master's degree,[1] by institutional control: Aggregate United States, fall 1949 to fall 1961

Fall of year	Publicly controlled institutions		Privately controlled institutions	
	Enrollment	Percent of total	Enrollment	Percent of total
1961	15, 061	45. 9	17, 743	54. 1
1960	14, 242	45. 6	16, 973	54. 4
1959	13, 613	45. 8	16, 100	54. 2
1958	12, 180	43. 3	15, 958	56. 7
1957	9, 516	39. 4	14, 620	60. 6
1956	8, 668	38. 5	13, 861	61. 5
1955	7, 698	41. 0	11, 081	59. 0
1954	7, 405	42. 5	10, 036	57. 5
1953	7, 230	38. 9	11, 377	61. 1
1952	6, 680	38. 1	10, 859	61. 9
1951	6, 501	38. 8	10, 264	61. 2
1950	6, 354	40. 0	9, 515	60. 0
1949	6, 350	41. 7	8, 892	58. 3

[1] Includes also enrollment for the postgraduate predoctoral degree of engineer.

Table 13.—Number and percent of engineering students enrolled for the master's degree in evening courses: Aggregate United States, fall 1949 to fall 1961 [1]

Fall of year	Enrollment	Percent of total engineering enrollment for master's degree
1961	14, 353	43. 8
1960	12, 110	38. 8
1959	12, 315	41. 4
1958	12, 975	46. 1
1957	11, 375	47. 1
1956	11, 239	49. 9
1955	9, 174	48. 9
1954	8, 964	51. 4
1953	10, 508	56. 5
1952	10, 111	57. 6
1951	9, 682	57. 8
1950	7, 592	47. 8
1949	4, 821	31. 6

[1] Includes also enrollment for the postgraduate predoctoral degree of engineer.

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Enrollment for the master's and other predoctoral degrees in engineering was reported by 151 institutions—89 publicly controlled and 62 privately controlled. The average enrollment in engineering at this level for publicly controlled institutions was 169, and for privately controlled was 286.

Engineering Enrollment for the Doctorate

Enrollment for the doctorate in engineering was 7,869 in the fall of 1961—the highest number ever reported, and nearly three times the number reported 10 years earlier. Enrollments for the doctorate in engineering have increased for six consecutive years (table 14). Enrollment for the doctorate in engineering increased 22 percent from the fall of 1960 to the fall of 1961. This percentage increase has been exceeded only once since this series of surveys began in 1949.

Engineering enrollment for the doctorate reached new highs in both publicly and privately controlled institutions in 1961 (table 15). Engineering enrollment for the doctorate in publicly controlled institutions was 4,078 in the fall of 1961—an increase of 27 percent from the fall of 1960 and more than three and one-half times the number reported 10 years earlier. Engineering enrollment for the doctorate in privately controlled

Table 15.—Distribution of engineering enrollment for the doctorate, by institutional control: Aggregate United States, fall 1949 to fall 1961

Fall of year	Publicly controlled institutions		Privately controlled institutions	
	Enrollment	Percent of total	Enrollment	Percent of total
1961	4,078	51.8	3,791	48.2
1960	3,219	49.9	3,226	50.1
1959	2,600	46.1	3,043	53.9
1958	2,260	47.4	2,503	52.6
1957	1,859	44.5	2,321	55.5
1956	1,539	45.2	1,863	54.8
1955	1,434	45.3	1,729	54.7
1954	1,541	47.0	1,740	53.0
1953	1,225	40.8	1,776	59.2
1952	1,149	39.2	1,781	60.8
1951	1,151	40.0	1,724	60.0
1950	1,212	43.3	1,589	56.7
1949	929	36.5	1,614	63.5

Table 14.—Engineering enrollment for the doctorate, and percent change from the previous year: Aggregate United States, fall 1949 to fall 1961

[NA=data not available]

Fall of year	Enrollment	Percentage change from previous year
1961	7,869	22.1
1960	6,445	14.2
1959	5,643	18.5
1958	4,763	13.9
1957	4,180	22.9
1956	3,402	7.6
1955	3,163	−3.6
1954	3,281	9.3
1953	3,001	2.4
1952	2,930	1.9
1951	2,875	2.6
1950	2,801	10.1
1949	2,543	NA

Table 16.—Number and percent of engineering enrollment for the doctorate in evening courses: Aggregate United States, fall 1949 to fall 1961

Fall of year	Enrollment	Percent of total engineering enrollment for the doctorate
1961	1,016	12.9
1960	603	9.4
1959	918	16.3
1958	714	15.0
1957	690	16.5
1956	528	15.5
1955	508	16.1
1954	796	24.3
1953	703	23.4
1952	669	22.8
1951	456	15.9
1950	453	16.2
1949	155	6.1

institutions in the fall of 1961 was 3,791—an increase of 18 percent from the fall of 1960 and more than twice the number reported 10 years earlier. The annual trend from the fall of 1949 to the fall of 1960 has been for an increasing proportion of the students working for the doctorate in engineering to enroll in publicly controlled institutions. In the fall of 1949, 37 percent of such enrollments were in publicly controlled institutions, as compared to 52 percent in the fall of 1961.

Enrollments for the doctorate in engineering were reported by 94 institutions, 54 of which were publicly controlled and 40 privately controlled. The publicly controlled institutions had an average of 76 students enrolled for the doctorate in engineering, while the privately controlled institutions had an average of 95.

In the fall of 1961, 1,016 students were enrolled in evening classes for the doctorate in engineering (table 16)—only 13 percent of all engineering students enrolled for that degree. The only years in which smaller proportions were enrolled in evening classes were 1949 and 1960 when the proportions were 6 percent and 9 percent respectively.

First-Level Degrees in Engineering

During the 1960–61 school year, 35,900 first-level engineering degrees were conferred by institutions of higher education in the aggregate United States. This number is 5 percent below the number reported during 1959–60, and is the second consecutive year that there has been a decrease in first-level engineering degrees conferred (tables 17 and 18).

During 1960–61, 13 percent of the total number of first-level degrees conferred on men in all fields of study were awarded in engineering. This is the smallest proportion conferred since 1955–56 (table 18).

The number of first-level engineering degrees conferred by publicly controlled institutions increased each year from 1953–54 through 1958–59, and then showed a decrease for the last two consecutive years (table 19). The total decrease in the last two years was 6 percent. The number of first-level degrees conferred by the privately controlled institutions increased each year from 1954–55 to 1959–60 and then decreased last year. The decrease from 1959–60 to 1960–61 was 9 percent. From 1953–54 to 1960–61 the proportion of all first-level engineering degrees conferred by publicly controlled institutions increased.

During 1960–61, 65 percent of the first-level degrees in engineering were conferred by publicly controlled institutions. A similar comparison for all fields of study indicates that approximately 54 percent of all the first-level degrees were conferred by publicly controlled institutions.[6]

Table 17.—Engineering degrees conferred by level: Aggregate United States, 1948–49 to 1960–61

Year	Total	First-level	Master's [1]	Doctor's
1960–61	44, 980	35, 860	8, 177	943
1959–60	45, 753	37, 808	7, 159	786
1958–59	45, 601	38, 134	6, 753	714
1957–58	41, 767	35, 332	5, 788	647
1956–57	37, 039	31, 211	5, 232	596
1955–56	31, 640	26, 306	4, 724	610
1954–55	27, 672	22, 589	4, 484	599
1953–54	27, 003	22, 236	4, 177	590
1952–53	28, 499	24, 164	3, 743	592
1951–52	35, 013	30, 286	4, 141	586
1950–51	47, 635	41, 893	5, 156	586
1949–50	58, 130	52, 732	4, 904	494
1948–49	50, 415	45, 200	4, 798	417

[1] Includes other postgraduate predoctoral degrees.

First-level engineering degrees were conferred by 236 institutions during 1960–61—123 publicly controlled institutions and 113 privately controlled. The average number of first-level engineering degrees conferred was 152—190 for publicly controlled institutions, and 111 for the privately controlled institutions.

[6] Data not available for 1960–61. The estimates are based upon the annual trend observed since 1957–58.

Table 18.—Annual percentage change in first-level engineering degrees conferred, and percent they were of total first-level degrees conferred on men: Aggregate United States, 1948–49 to 1960–61

[NA=data not available]

Year	Percent change from previous year	Percent of total first-level degrees awarded to men [1]
1960–61	−5.2	[2] 13.2
1959–60	−.9	14.8
1958–59	7.9	15.0
1957–58	13.2	14.5
1956–57	18.6	14.0
1955–56	16.5	13.2
1954–55	1.6	12.3
1953–54	−8.0	11.9
1952–53	−20.2	12.0
1951–52	−27.7	13.3
1950–51	−20.6	15.0
1949–50	16.7	16.0
1948–49	NA	17.1

[1] See *Earned Degrees Conferred, 1959–60—Bachelor's and Higher Degrees* (Circular No. 687) by Wayne E. Tolliver. U.S. Department of Health, Education, and Welfare, Office of Education. Washington: U.S. Government Printing Office. 1962.

[2] Estimated.

Table 19.—Distribution of engineering and total first-level degrees, by institutional control: Aggregate United States, 1948–49 to 1960–61

[NA=data not available]

Year	First-level engineering degrees awarded				Total first-level degree [1]	
	Publicly controlled institutions		Privately controlled institutions		Public as percent of total	Private as percent of total
	Number	Percent of total	Number	Percent of total		
1960–61	23,327	65.1	12,533	34.9	NA	NA
1959–60	24,016	63.5	13,792	36.5	54.4	45.6
1958–59	24,723	64.8	13,411	35.2	54.7	45.3
1957–58	22,586	63.9	12,746	36.1	54.3	45.7
1956–57	19,581	62.7	11,630	37.3	53.2	46.8
1955–56	15,982	60.8	10,324	39.2	52.1	47.9
1954–55	13,305	58.9	9,284	41.1	51.3	48.7
1953–54	12,855	57.8	9,381	42.2	50.6	49.4
1952–53	14,070	58.2	10,094	41.8	51.0	49.0
1951–52	17,776	58.7	12,510	41.3	49.4	50.6
1950–51	24,881	59.4	17,012	40.6	50.4	49.6
1949–50	32,517	61.7	20,215	38.3	50.1	49.9
1948–49	26,873	59.5	18,327	40.5	49.3	50.7

[1] See *Earned Degrees Conferred, 1959–60 Bachelor's and Higher Degrees* (Circular No. 687), by Wayne E. Tolliver. U.S. Department of Health, Education, and Welfare, Office of Education. Washington: U.S. Government Printing Office, 1962.

Master's Degrees [7]

The annual number of master's degrees conferred in engineering has been increasing each year since 1952–53, reaching a total of 8,177 in 1960–61 (table 17). This is the largest number of master's degrees ever conferred in engineering and it is 14 percent above the number conferred during 1959–60. The percentage increase from 1959–60 to 1960–61 has been exceeded only once since this series of annual surveys began (table 20).

The data presented in the last column of table 20 shows that from 1952–53 to 1960–61 an increasing percentage of the total master's degrees conferred on men has been in engineering.

The percentage of master's degrees conferred by publicly controlled and privately controlled institutions remains about the same each year, and there is no definite indication that the percentages will change in the near future. From the time this series of surveys began in 1948–49 to 1960–61 approximately one-half (49 percent) of the master's degrees conferred in engineering were conferred by publicly controlled institutions and the remaining one-half (51 percent) were conferred by privately controlled institutions.

During 1960–61, master's degrees in engineering were conferred by 142 institutions—87 publicly controlled institutions and 55 privately controlled institutions. The average number of master's degrees conferred was 58—48 for the publicly controlled institutions and 73 for the privately controlled.

[7] Also other postgraduate predoctoral degrees. These are usually engineer degrees such as C.E. (civil engineer) and E.E. (electrical engineer). In this section of the publication, postgraduate predoctoral degrees are included with the master's degrees. During 1960-61 there were 160 such degrees conferred.

Table 20.—Annual percentage change in master's degrees [1] conferred in engineering, and percent they were of total master's degrees conferred on men: Aggregate United States, 1948–49 to 1960–61

[NA=data not available]

Year	Percentage change from previous year	Percent of total master's degrees awarded men [2]
1960–61	14.2	[3] 15.2
1959–60	6.0	14.1
1958–59	16.7	14.3
1957–58	10.6	13.1
1956–57	10.8	12.7
1955–56	5.4	12.0
1954–55	7.3	11.6
1953–54	11.6	10.9
1952–53	−9.6	9.1
1951–52	−19.7	9.5
1950–51	5.1	11.2
1949–50	2.2	11.9
1948–49	NA	13.6

[1] Includes also the postgraduate predoctoral degree of engineer.

[2] See *Earned Degrees Conferred, 1959–60—Bachelor's and Higher Degrees* (Circular No. 687), by Wayne E. Tolliver. U.S. Department of Health, Education, and Welfare, Office of Education. Washington: U.S. Government Printing Office, 1962.

[3] Estimated.

Table 21.—Distribution of engineering and total master's degrees conferred, by institutional control: Aggregate United States, 1948–49 to 1960–61

[NA=data not available]

Year	Master's [1] engineering degrees awarded				Total master's degrees [2]	
	Publicly controlled institutions		Privately controlled institutions		Public as percent of total	Private as percent of total
	Number	Percent of total	Number	Percent of total		
1960–61	4,144	50.7	4,033	49.3	NA	NA
1959–60	3,477	48.6	3,682	51.4	57.7	42.3
1958–59	3,199	47.4	3,554	52.6	58.1	41.9
1957–58	2,763	47.7	3,025	52.3	57.8	42.2
1956–57	2,602	49.7	2,630	50.3	56.8	43.2
1955–56	2,338	49.5	2,386	50.5	55.9	44.1
1954–55	2,169	48.4	2,315	51.6	55.5	44.5
1953–54	1,900	45.5	2,277	54.5	54.0	46.0
1952–53	1,738	46.4	2,005	53.6	51.0	49.0
1951–52	2,042	49.3	2,099	50.7	49.6	50.4
1950–51	2,692	52.2	2,464	47.8	48.3	51.7
1949–50	2,406	49.1	2,498	50.9	45.0	55.0
1948–49	2,209	46.0	2,589	54.0	41.5	58.5

[1] Includes also the postgraduate predoctoral degree of Engineer.

[2] See *Earned Degrees Conferred, 1959–60—Bachelor's and Higher Degrees* (Circular No. 687) by Wayne E. Tolliver, U.S. Department of Health, Education, and Welfare, Office of Education. Washington: U.S. Government Printing Office, 1962.

Doctor's Degrees

The number of doctorates conferred in engineering has increased for four consecutive years—from 596 in 1956–57 to 943 in 1960–61, an increase of 58 percent in 4 years. This is also the first year that more than 900 doctorates were conferred in engineering (table 17).

The number of doctorates conferred in engineering during 1960–61 was 20 percent above the number conferred during 1959–60. This is the largest annual percentage increase reported since this series of surveys began in 1948–49 (table 22).

The proportion of doctorates conferred in engineering by publicly controlled and privately controlled institutions is very similar to the proportions conferred at the master's level (tables 21 and 23).

During 1960–61, doctorates in engineering were conferred by only 68 institutions—39 publicly controlled institutions and 29 privately controlled institutions. The average number of doctorates conferred was 14—12 for the public institutions and 16 for the private institutions.

Table 22.—Annual percentage change in doctorates conferred in engineering, and percent they were of the total doctorates conferred on men: Aggregate United States, 1948–49 to 1960–61

[NA=data not available]

Year	Percentage change from previous year	Percent of total doctorates awarded to men [1]
1960–61	20.0	[2] 10.0
1959–60	10.1	8.9
1958–59	10.4	9.4
1957–58	8.6	8.1
1956–57	−2.3	7.6
1955–56	1.8	7.6
1954–55	1.5	7.5
1953–54	−0.3	7.2
1952–53	1.0	7.9
1951–52	0	8.4
1950–51	18.6	8.8
1949–50	18.5	8.2
1948–49	NA	9.2

[1] See *Earned Degrees Conferred, 1959–60—Bachelor's and Higher Degrees* (Circular 687), by Wayne E. Tolliver, U.S. Department of Health, Education, and Welfare, Office of Education. Washington: U.S. Government Printing Office, 1962.

[2] Estimated.

Table 23—Distribution of engineering and total doctorates conferred, by institutional control: Aggregate United States, 1948–49 to 1960–61

[NA=data not available]

Year	Doctorates awarded in engineering				Total doctorates [1]	
	Publicly controlled institutions		Privately controlled institutions		Public as percent of total	Private as percent of total
	Number	Percent of total	Number	Percent of total		
1960–61	479	50.8	464	49.2	NA	NA
1959–60	374	47.6	412	52.4	51.9	48.1
1958–59	316	44.3	398	55.7	51.8	48.2
1957–58	309	47.8	338	52.2	51.6	48.4
1956–57	296	49.7	300	50.3	51.2	48.8
1955–56	303	49.7	307	50.1	51.5	48.5
1954–55	299	49.9	300	50.1	51.6	48.4
1953–54	314	53.2	276	46.8	51.8	48.2
1952–53	284	48.0	308	52.0	49.7	50.3
1951–52	297	50.7	289	49.3	45.2	54.8
1950–51	263	44.9	323	55.1	41.5	58.5
1949–50	218	44.1	276	55.9	40.2	59.8
1948–49	159	38.1	258	61.9	39.5	60.5

[1] See *Earned Degrees Conferred, 1959–60 Bachelor's and Higher Degrees* (Circular No. 687), by Wayne E. Tolliver. U.S. Department of Health, Education, and Welfare, Office of Education. Washington; U.S. Government Printing Office, 1962.

Major Fields of Engineering

Interest in the supply of new professional engineering talent relates not only to the number of new engineers produced by our higher educational institutions, but also to their distribution among the various engineering fields.

The specific major fields of engineering which were recognized at the time of this study by the Engineers' Council for Professional Development and for which separate data on enrollment and degrees are presented in the basic tables of Part II of this publication are the following:

Aeronautical
Agricultural
Architectural
Building and Construction
Ceramic
Chemical
Civil
Electrical
Engineering Mechanics
Engineering Physics
Engineering Science
General Engineering
Geological
Geophysical
Industrial
Mechanical
Metallurgical
Mining
Naval Architecture and Marine
Nuclear
Petroleum
Sanitary
Textile
Transportation
Welding

Table 24.—Percent of freshman, 2d-year, and 3d-year undergraduate engineering students in the unclassified category: Aggregate United States, fall 1950 to fall 1961

Fall of year	Freshman year	Second year	Third year
1961	32.2	9.5	1.6
1960	32.4	11.0	1.6
1959	33.6	11.2	1.2
1958	31.4	11.2	0.7
1957	30.6	8.3	1.0
1956	29.0	8.0	0.8
1955	29.7	7.0	0.9
1954	29.1	7.1	0.4
1953	27.0	5.4	0.5
1952	28.8	4.7	0.5
1951	29.1	4.6	0.8
1950	23.0	4.0	0.3

Institutions in the survey of engineering enrollments and degrees also report "unclassified" and "other" enrollments.[8] In recent years one-third of the freshmen were in the "unclassified" group which indicates they had not selected a field of concentration among the engineering specialities (table 24). The percentage of students who have not decided on a specific engineering field declines sharply after the freshman year. In the fall of 1961, 10 percent of the second-year students, 2 percent of the third-year students and three-tenths of one percent of the fourth-year students were reported as "unclassified."

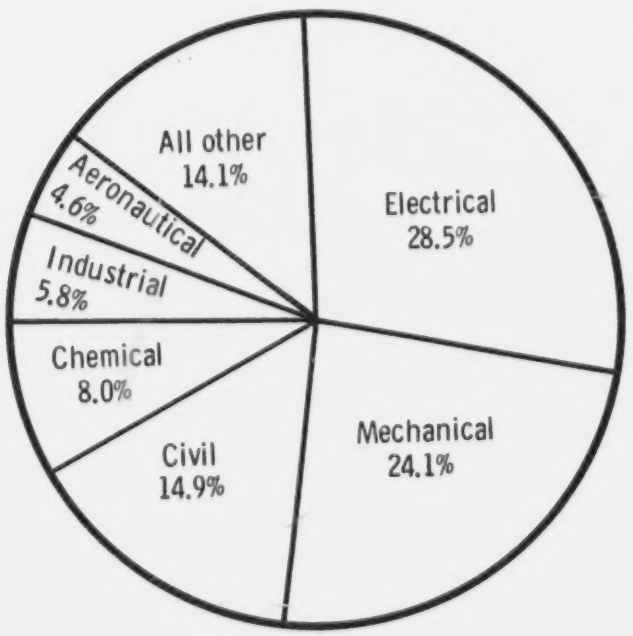
[8] The instructions for use of these categories, given on the report forms, are reproduced in the present publication under "Notes."

Degrees Conferred in the Six Largest Fields of Engineering

From the time the Office of Education began collecting earned-degree data in engineering in 1949–50 to the present, more than 80 percent of the first-level degrees have been conferred in six major fields of engineering which are (in the order of their size): Electrical, mechanical, civil, chemical, industrial, and aeronautical engineering (table 25).

Electrical engineering is currently the largest of these fields, having replaced mechanical engineering which was the largest field until 1956–57. More than one-half of the first-level degrees conferred in engineering since 1949–50 have been in these two fields. The remaining four fields have consistently been the four next largest fields. Together they account for approximately one-third of the first-level engineering degrees.

Figure 2.—Percentage distribution of first-level engineering degrees, by field: Aggregate United States, 1960–61.



The six fields of study which account for approximately 80 percent of the master's degrees in engineering are (in the order of their size): Electrical, mechanical, civil, chemical, industrial, and aeronautical engineering (table 26). Among these fields, electrical engineering has consistently been the largest. During 1960–61 approximately 30 percent of the master's degrees in engineering were in electrical engineering. Past trends indicate that an even larger percentage of such degrees may be expected in this field in the future.

Mechanical engineering is currently the second largest field in engineering at the master's level, having replaced civil engineering which was the second largest field until 1955–56. These two fields together account for approximately one-third of the master's degrees in engineering.

Figure 3.—Percentage distribution of master's degrees in engineering, by field: Aggregate United States, 1960–61.

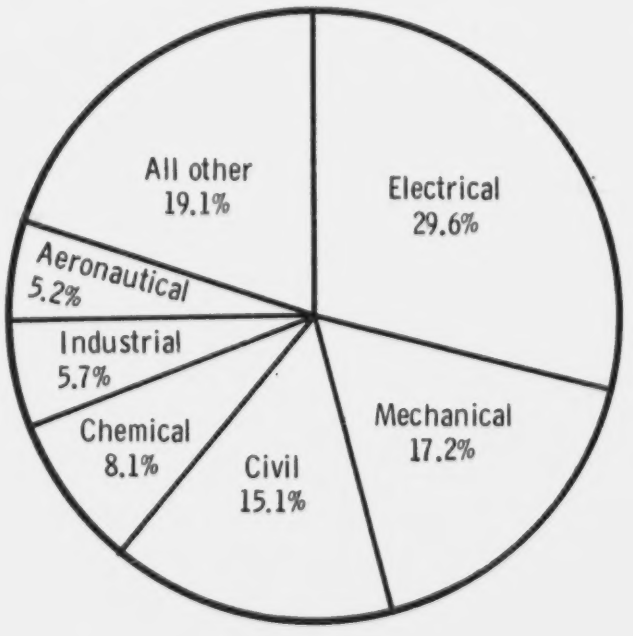
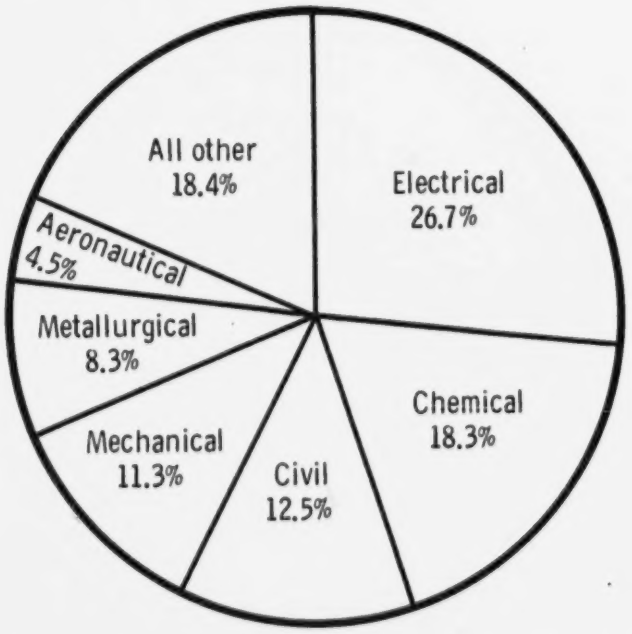


Figure 4.—Percentage distribution of doctor's degrees in engineering, by field: Aggregate United States, 1960–61.



Chemical engineering is the fourth ranking field at the master's level. However, it may not remain in this position much longer if the annual percent of degrees conferred in this field continues to decline. During 1960–61, 8 percent of the master's degrees in engineering were in this field. Industrial and aeronautical are the fifth and sixth largest fields respectively. During 1960–61 these two fields together accounted for approximately 11 percent of the master's degrees in engineering.

The six fields of study in which approximately 80 percent of the doctor's degrees in engineering were conferred are (in the order of their size): Electrical, chemical, civil, mechanical, metallurgical, and aeronautical engineering (table 27). Electrical engineering is currently the largest of these fields, having replaced chemical engineering

Table 25.—Percent of total first-level engineering degrees conferred in each of the 6 largest fields: Aggregate United States, 1949–50 to 1960–61

Year	Field						
	Electrical	Mechanical	Civil	Chemical	Industrial	Aeronautical	All 6 fields
1960–61	28.5	24.1	14.9	8.0	5.8	4.6	85.9
1959–60	28.1	25.4	14.0	7.8	5.9	4.5	85.8
1958–59	28.3	25.2	14.1	8.2	6.0	4.1	85.9
1957–58	27.1	25.6	14.5	8.5	6.0	3.8	85.5
1956–57	26.0	25.3	15.0	9.0	6.2	3.6	85.1
1955–56	23.7	25.6	16.1	9.4	6.3	3.4	84.4
1954–55	21.6	26.1	17.2	9.0	6.4	3.0	83.2
1953–54	20.2	24.4	17.8	9.2	6.0	3.0	80.6
1952–53	20.3	24.5	18.2	9.4	6.3	2.7	81.4
1951–52	21.1	25.2	17.7	9.5	6.0	2.7	82.1
1950–51	22.4	25.7	16.9	9.0	6.2	3.0	83.2
1949–50	25.2	27.2	14.8	8.6	6.4	2.9	85.1

Table 26.—Percent of total master's degrees in engineering conferred in each of the 6 largest fields: Aggregate United States, 1951–52 to 1960–61

Year	Field						
	Electrical	Mechanical	Civil	Chemical	Industrial	Aeronautical	All 6 fields
1960–61	29.6	17.2	15.1	8.1	5.7	5.2	80.9
1959–60	27.9	16.6	14.4	8.8	6.7	4.7	79.1
1958–59	27.4	16.1	14.0	9.0	8.8	4.8	80.0
1957–58	27.4	16.7	14.2	9.9	8.7	5.2	81.9
1956–57	25.2	16.6	15.8	11.6	7.8	4.8	81.8
1955–56	24.9	17.7	16.4	11.9	7.7	4.4	83.1
1954–55	24.5	15.8	17.3	10.6	8.6	4.2	81.0
1953–54	24.0	14.0	17.8	11.1	9.4	5.0	81.2
1952–53	24.3	15.7	17.1	12.1	6.0	5.3	80.6
1951–52	24.8	14.3	15.9	13.5	6.6	5.5	80.7

Table 27.—Percent of total doctorates in engineering conferred in each of the 6 largest fields: Aggregate United States, 1951–52 to 1960–61

Year	Field						
	Electrical	Chemical	Civil	Mechanical	Metallurgical	Aeronautical	All 6 fields
1960–61	26.7	18.3	12.5	11.3	8.3	4.5	81.6
1959–60	26.0	21.8	9.3	13.7	8.3	2.9	82.0
1958–59	26.5	20.0	9.8	11.6	8.8	3.4	80.1
1957–58	22.3	19.7	10.7	11.8	9.8	4.0	78.3
1956–57	21.8	24.5	6.5	11.2	8.9	5.4	78.3
1955–56	22.3	22.3	9.7	10.0	11.8	5.9	82.0
1954–55	23.5	23.2	4.8	13.2	10.4	3.8	78.9
1953–54	18.8	22.5	7.3	12.2	9.0	7.3	77.1
1952–53	22.3	24.8	5.4	13.2	9.5	4.9	80.1
1951–52	20.6	27.1	7.3	11.6	9.0	4.1	79.7

as the largest field since 1957–58. Together these fields accounted for 45 percent of the doctor's degrees in engineering during 1960–61. Past trends indicate that in the future a larger percent of the engineering doctor's degrees will be in electrical engineering and a smaller percent in chemical engineering.

Civil engineering replaced mechanical engineering as the third ranking field at the doctor's level during 1960–61. This is the first year since this series of surveys began that more doctor's degrees have been conferred in civil engineering than mechanical engineering. Together these fields accounted for approximately 24 percent of the doctor's degrees in engineering—13 percent in civil and 11 percent in mechanical. Metallurgical engineering dropped to the fifth ranking position, in terms of the number of doctor's degrees conferred in engineering, during 1957–58 and has remained in that position. During 1960–61, 8 percent of the doctor's degrees in engineering were in metallurgical. During 1960–61, 4.5 percent of the doctorates in engineering were conferred in aeronautical and another 4.5 percent in engineering mechanics. During the last decade, however, more doctorates have been conferred in aeronautical engineering than in engineering mechanics. Accordingly, aeronautical engineering has been listed in table 27 as the sixth largest field.

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Notes

The report forms used in the survey do not appear in this circular, since tables A and B constitute, in essence, a reproduction of these forms. The instructions on the report forms include the following:

1. Report all undergraduate students working for their first engineering degree, whether enrolled on campus, on a branch campus, or in an extension center. Include only students who are enrolled definitely as candidates for an engineering degree.
2. Report all students who have been admitted to formal graduate standing and are enrolled in graduate courses—regardless of the number of credit hours carried by the student, and regardless of whether the student's work is administered by the engineering college or the graduate school.
3. Exclude enrollment and degrees granted in non-engineering fields (such as architecture, chemistry, geology, metallurgy, etc.) even if the programs of work are administered by the engineering college.
4. In some institutions, engineering degrees are given a general designation (e.g., B.S. in engineering) rather than a specific one (e.g., B.S. in mining engineering). Please classify such engineering degrees as specifically as possible.
5. Please note distinctions among general engineering, "unclassified" and "others." General engineering includes those working for the degree in general engineering. "Unclassified" includes those not yet classified with respect to the engineering degree which they plan to obtain. "Others" includes students working for a particular engineering degree other than those listed. Please specify the degree (or degrees) for which students in this last group are working. Please observe also the distinction between mechanical engineering and engineering mechanics. Attention is also called to the two separately accredited curriculums of engineering physics and engineering science.

The Missouri School of Mines and the University of Missouri are shown as separate institutions in the tables of part II, but their names are bracketed. The brackets are meant to indicate that Missouri School of Mines is part of the University of Missouri. This method of presenting the data for these institutions is used because (1) they are separately accredited by ECPD and have different curriculums, and (2) in publications of the Office of Education of engineering enrollments and degrees of previous years all data for these two schools have been presented separately.

Part II
Basic Tables of Detailed Data on Engineering Enrollments and Degrees: 1961

A total of 245 institutions conferring degrees in engineering reported the data in the 5 basic tables found in part II.

The five tables follow the formats used in previous reports of the U.S. Office of Education on engineering enrollments and degrees. The period covered for degrees awarded is the 12-month period, July 1, 1960, through June 30, 1961; and for enrollments the time is the fall of 1961. The data are presented by State, institution, class level, and the 25 curriculums recognized by ECPD; they also indicate which curriculums are accredited by ECPD.

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TABLE A.-- Enrollment and degrees conferred in engineering at bachelor's or first professional level, by curriculum: Aggregate United States 1/, 1961
(— = Zero)

Engineering curriculum 2/	Number of schools	Number of bachelor's or first professional engineering degrees: 1960-61		Number enrolled for the bachelor's or first professional engineering degrees: Fall 1961									
				Total		First year	Second year	Third year	Fourth year	Fifth year of 5-year curriculum	Fifth year of co-operative program	Part-time day students	Evening students
		Men	Women	Men	Women								
	1	2	3	4	5	6	7	8	9	10	11	12	13
Total	242	35,725	135	230,784	1,320	67,575	48,692	39,149	39,307	1,935	2,296	4,134	29,016
Aeronautical	54	1,661	5	8,175	40	2,585	2,051	1,381	1,452	61	37	67	581
Agricultural	50	435	-	1,925	2	561	451	380	496	33	-	5	1
Architectural	28	308	4	2,248	55	808	523	324	365	61	2	18	202
Building & Construction	4	55	-	257	1	55	66	60	71	6	-	-	-
Ceramic	15	159	8	891	19	234	266	217	180	6	-	7	-
Chemical	130	2,845	19	16,902	192	4,565	4,558	3,324	3,106	162	233	143	1,003
Civil	176	5,305	25	27,358	121	6,476	5,854	5,655	6,230	333	243	413	2,275
Electrical	195	10,175	25	65,730	212	14,503	14,577	12,539	12,171	524	662	1,336	9,630
Engineering Mechanics	13	65	-	531	6	66	155	141	171	-	-	4	-
Engineering Physics	29	377	4	1,742	20	330	495	399	391	56	4	11	76
Engineering Science	29	229	2	1,515	25	388	394	342	256	3	24	6	127
General Engineering 3/	34	918	5	5,413	86	2,044	945	861	748	-	8	64	829
Geological	23	161	1	423	1	82	81	94	158	5	1	2	1
Geophysical	5	28	-	165	1	47	48	43	28	-	-	-	-
Industrial 4/	94	2,077	7	9,313	36	1,300	1,638	1,995	2,061	167	203	189	1,796
Mechanical	188	8,629	22	46,286	145	9,155	9,283	8,537	9,009	445	788	991	8,223
Metallurgical	54	719	1	3,012	14	454	636	711	669	38	44	72	402
Mining	29	220	-	787	2	157	174	192	235	13	2	7	9
Naval Arch. and Marine	8	318	-	1,315	3	332	445	296	243	-	-	2	-
Nuclear	12	66	-	595	12	199	172	129	100	-	6	1	-
Petroleum	25	452	3	1,341	5	271	216	237	421	9	-	26	166
Sanitary	3	5	-	12	-	1	1	3	7	-	-	-	-
Textile	8	53	1	225	4	46	100	39	44	-	-	-	-
Transportation	-	-	-	-	-	-	-	-	-	-	-	-	-
Welding Engineering	2	15	-	72	-	13	16	20	13	10	-	-	-
Unclassified	131	12	-	30,619	280	21,753	4,620	613	124	3	37	683	3,066
Other 2/	34	438	3	3,932	38	1,150	927	617	558	-	2	87	629

1/ The aggregate United States includes the 50 States, the District of Columbia, and Puerto Rico. The data in this table are for all accredited institutions which grant bachelor's or first professional engineering degrees. A similar table covering the 161 schools accredited by ECPD, with totals by classes for the other 84 schools and for 10 Canadian schools, will appear in an early issue of The Journal of Engineering Education.

2/ All curriculums accredited prior to 1961 by ECPD in one or more institutions are listed by specific title; curriculums which were not then accredited by ECPD at any institution are included under "Other."

3/ Includes also the separately accredited curriculum of "Engineering" at the University of California (Los Angeles) and at Stevens Institute of Technology (as distinguished from "General Engineering").

4/ Includes administrative engineering, management engineering, and others in this field.

Table B.— Graduate enrollment and degrees in engineering, by curriculum: Aggregate United States 1/, 1961
(— = Zero)

Engineering curriculum 2/	Number of schools	Number of master's degrees in engineering: 1960-61		Number enrolled in work for the master's degree: Fall 1961				Number of other post-graduate pre-doctoral degrees 3/in engineering: 1960-61		Number enrolled in work for other post-graduate pre-doctoral degrees 3/: Fall 1961				Number of doctor's degrees in engineering: 1960-61		Number enrolled in work for the doctor's degrees: Fall 1961			
				Total		Day students, full-time and part-time	Evening students			Total		Day students, full-time and part-time	Evening students			Total		Day students, full-time and part-time	Evening students
		Men	Wo.	Men	Wo.			Men	Wo.	Men	Wo.			Men	Wo.	Men	Wo.		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Total	152	7,991	27	31,923	131	17,984	14,070	159	-	745	5	467	283	937	6	7,839	30	6,853	1,016
Aeronautical	45	413	3	1,287	4	982	309	21	-	91	-	91	-	41	1	388	3	351	40
Agriculture	37	95	-	226	-	226	-	-	-	1	-	1	-	17	-	99	-	99	-
Architectural	10	8	-	40	2	42	-	-	-	-	-	-	-		-	-	-	-	-
Building & Construction	2	11	-	14	-	14	-	-	-	3	-	3	-	-	-	3	-	3	-
Ceramic	15	31	1	80	4	84	-	-	-	-	-	-	-	13	-	76	1	77	-
Chemical	101	639	2	2,159	14	1,418	755	9	-	10	1	9	2	171	-	1,128	2	984	146
Civil	115	1,206	1	3,073	13	2,177	909	13	-	69	2	43	28	116	1	812	3	761	54
Electrical	131	2,360	4	10,852	39	5,113	5,778	50	-	272	-	125	147	249	1	2,156	6	1,748	414
Engineering Mechanics	38	219	3	763	3	604	162	-	-	7	-	3	4	41	1	423	3	415	11
Engineering Physics	10	6	-	89	-	87	2	-	-	8	-	8	-	1	-	100	-	100	-
Engineering Science	96	135	-	592	5	133	464	-	-	-	-	-	-	14	1	84	1	53	32
General Engineering 4/	7	137	3	888	4	790	102	3	-	-	-	-	-	8	-	273	4	277	-
Geological	10	16	-	44	-	44	-	-	-	-	-	-	-	3	-	5	-	5	-
Geophysical	3	6	-	40	-	40	-	-	-	-	-	-	-	4	-	14	-	14	-
Industrial 5/	55	456	-	2,664	6	857	1,813	2	-	12	-	10	2	19	-	211	1	155	57
Mechanical	123	1,367	5	5,865	15	3,215	2,665	29	-	170	2	78	94	106	-	1,048	2	871	179
Metallurgical	47	215	1	773	6	573	206	2	-	5	-	5	-	78	-	420	3	375	48
Mining	20	33	-	140	-	120	20	-	-	-	-	-	-	2	-	46	-	46	-
Naval Arch. & Marine	5	53	-	51	-	50	1	28	-	65	-	65	-	4	-	11	-	11	-
Nuclear	34	206	1	494	1	451	44	1	-	6	-	2	4	16	-	251	-	242	9
Petroleum	16	82	-	241	1	177	65	-	-	-	-	-	-	3	-	31	-	31	-
Sanitary	20	74	-	148	2	148	2	-	-	6	-	6	-	11	1	55	-	54	1
Textile	4	18	1	32	-	32	-	-	-	1	-	1	-	-	-	2	-	2	-
Transportation	1	16	-	13	-	13	-	-	-	-	-	-	-	-	-	11	-	11	-
Welding Engineering	1	1	-	8	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Unclassified	24	22	-	767	2	100	669	-	-	6	-	6	-	7	-	18	-	6	12
Other 2/	28	166	2	580	10	486	104	1	-	13	-	11	2	13	-	174	1	162	13

1/ The aggregate United States includes the 50 States, the District of Columbia, and Puerto Rico. The data in this table are for all accredited institutions which grant advanced engineering degrees. A similar table covering the 140 schools accredited by ECPD, with totals by classes for the other 12 schools and the 10 Canadian schools, will appear in an early issue of The Journal of Engineering Education.

2/ All curriculums accredited at the undergraduate level prior to 1961 by ECPD in one or more institutions are listed by specific title; curriculums which were not then accredited by ECPD at any institution are included under "Other."

3/ Engineering degrees requiring work beyond the master's degrees, but requiring less than the doctor's degree.

4/ Includes also the curriculum "Engineering" (as distinguished from "General Engineering") at the University of California at Los Angeles and Berkeley.

5/ Includes administrative engineering, management engineering, and others in this field.

Table C.--Total engineering enrollments and degrees by level, State and institution: 1961

(- = Zero)

Institution	Enrollments Fall 1961			Degrees 1960-61		
	B.S.	M.S.	Ph.D.	B.S.	M.S.	Ph.D.
GRAND TOTAL.....	232104	32804	7869	35860	8177	943
ALABAMA	3445	280	5	625	29	-
*Auburn Univ.....	1106	49	2	410	16	-
Tuskegee Inst.....	187	3	-	9	-	-
*Univ Ala.....	2152	228	3	206	13	-
ALASKA	157	8	-	14	1	-
*Univ Alaska.....	157	8	-	14	1	-
ARIZONA	2430	372	65	326	88	2
*Ariz St Univ.....	959	199	9	80	22	-
*Univ Ariz.....	1471	173	56	246	66	2
ARKANSAS	1131	39	6	246	28	-
Ark St Col.....	25	-	-	7	-	-
John Brown Univ.....	73	-	-	6	-	-
*Univ Ark.....	1033	39	6	233	28	-
CALIFORNIA	16019	4020	1235	3044	1114	118
*Calif Inst Tech.....	235	176	112	55	123	23
Calif Maritime Acad....	130	-	-	42	-	-
Calif St Poly.....	(2831)	-	-	(407)	-	-
Kellogg V. Campus....	988	-	-	71	-	-
San Luis Ob. Campus..	1843	-	-	336	-	-
Chico St Col.....	216	-	-	33	-	-
Elect Tech Inst.....	452	-	-	-	-	-
Fresno St Col.....	313	-	-	56	-	-
Harvey Mudd Col.....	26	-	-	12	-	-
Heald Engr Col.....	631	-	-	124	-	-
Long Beach St Col.....	618	-	-	46	-	-
L A St Col of AA & S...	1085	-	-	139	-	-
Loyola Univ.....	244	-	-	50	-	-
Northrop Inst Tech.....	1129	-	-	423	-	-
Sacramento St Col.....	280	-	-	23	-	-
San Diego St Col.....	648	117	-	68	3	-
*San Jose St Col.....	1302	248	-	122	6	-
*Stanford Univ.....	873	547	364	239	346	45
*U S Naval PG Sch.....	256	84	4	169	51	1
Univ Calif.....	(3386)	(1363)	(697)	(745)	(358)	(48)
*Berkeley Campus.....	2107	560	403	475	226	39
Davis Campus.....	156	19	19	3	6	1
*Los Ang Campus.....	1057	784	275	267	126	8
Santa Barbara Campus.	66	-	-	1/	-	-
Univ of the Pacific....	66	-	-	8	-	-
Univ of Redlands.....	38	-	-	3	-	-
*Univ Santa Clara.....	272	281	-	53	-	-
*Univ Sou Calif.....	988	1204	58	227	227	1
COLORADO	4648	598	90	642	95	12
*Colo Mines.....	943	74	14	166	15	8
*Colo St Univ.....	686	35	28	100	14	1
*Univ Colo.....	2697	428	48	341	62	3
*Univ Denver.....	322	61		55	4	
CONNECTICUT	3354	461	113	365	114	17
Hillyer Col.....	937	-	-	42	-	-
New Haven Col.....	352	-	-	3	-	-
*Trinity Col.....	56	-	-	9	-	-
Univ Bridgeport.....	583	42	-	42	-	-
*Univ Conn.....	1100	273	29	134	41	-
*Yale Univ.....	326	146	84	135	73	17
DELWARE	541	118	33	77	38	4
*Univ Delaware.....	541	118	33	77	38	4
DIST OF COLUMBIA	1439	738	48	198	52	-
*Catholic Univ.....	308	182	42	62	13	-
*Geo Wash Univ.....	576	556	6	65	39	-
*Howard Univ.....	555	-	-	71	-	-
FLORIDA	2968	209	69	474	39	13
Florida St Univ.....	167	3	-	4	-	-
*Univ Fla.....	2011	206	69	360	39	13
*Univ Miami.....	790	-	-	110	-	-
GEORGIA	3690	235	68	576	100	9
*Ga Inst Tech.....	3626	235	68	558	96	9
*Univ Georgia.....	64	-	-	18	4	-
HAWAII	903	6	-	93	-	-
*Univ Hawaii.....	903	6	-	93	-	-
IDAHO	751	39	-	151	29	-
*Univ Idaho	751	39	-	151	29	-

Institution	Enrollments Fall 1961			Degrees 1960-61		
	B.S.	M.S.	Ph.D.	B.S.	M.S.	Ph.D.
ILLINOIS	10570	1296	674	1469	485	110
Aero - Space Inst.....	50	-	-	2/	-	-
*Bradley Univ.....	650	67		121	7	
*Ill Inst Tech.....	3632	497	138	347	59	8
Millikin Univ.....	121	-	-	8	-	-
North Central Col.....	52	-	-	10	-	-
*Northwestern Univ.....	772	257	116	136	96	23
*Univ Ill.....	5293	475	420	847	323	79
INDIANA	10922	767	303	1194	304	58
Evansville.....	379	-	-	39	-	-
Ind Tech.....	1261	-	-	2/	-	-
*Purdue Univ.....	6051	625	287	807	255	51
*Rose Poly Inst.....	411	9	-	59	-	-
Tri St Col.....	1232	-	-	2/	-	-
*Univ Notre Dame.....	1197	133	16	232	49	7
*Valparaiso Univ.....	391	-	-	57	-	-
IOWA	3432	353	177	536	116	26
*Iowa St U Sc & Tech...	2852	185	137	415	64	23
*St Univ Iowa.....	580	168	40	121	52	3
KANSAS	3304	469	67	688	106	2
*Kan St Univ.....	1289	125	29	318	52	-
*Univ Kan.....	1191	185	38	274	44	2
*Univ Wichita.....	824	159	-	96	10	-
KENTUCKY	2094	152	4	289	28	2
*Univ Ky.....	1454	110	-	201	13	-
*Univ Louisville.....	640	42	4	88	15	2
LOUISIANA	2900	267	20	610	52	4
*La Poly.....	838	59	-	120	8	-
*La St Univ.....	925	144	16	300	29	4
McNeese St Col.....	45	-	-	7	-	-
So Univ A & M Col.....	156	-	-	9	-	-
*Tulane.....	293	62	4	62	13	-
*Univ of S W La.....	643	2	-	112	2	-
MAINE	1101	30	-	244	15	-
Maine Maritime Acad...	131		-	35	-	-
*Univ Maine.....	970	30	-	209	15	-
MARYLAND	3521	364	206	399	53	20
*Johns Hopkins.....	1536	152	134	170	28	14
*Univ Maryland.....	1985	212	72	229	25	6
MASSACHUSETTS	9592	1958	645	1702	833	117
Boston Univ.....	591	-	-	98	-	-
Bradford Durfee.....	160	-	-	34	-	-
*Harvard Univ.....	117	71	156	28	67	19
*Lowell Tech Inst.....	422	11		105	11	
*Mass Inst Tech.....	1329	859	477	438	601	97
Mass Maritime Acad....	97	-	-	30	-	-
Merrimack Col.....	376	-	-	23	-	-
New Bedf'd Inst Tech..	142	-	-	30	-	-
*Northeastern.....	2992	810	3	386	120	-
Radcliffe Col.....	1	3	2		1	1
*Tufts Univ.....	549	-	-	130	-	-
*Univ Mass	928	76	-	140	9	-
Western New Eng. Col..	914	-	-	64	-	-
*Worcester Poly Inst...	974	128	7	196	24	-
MICHIGAN	14028	1244	502	2323	485	66
Chrysler Inst Engr....	-	20	-		2/	-
Detroit Inst Tech.....	393	-	-	63	-	-
Gen Motors Inst.....	2311	-	-	411	-	-
Lawrence Inst of Tech.	1483	-	-	140	-	-
*Mich M & T.....	2016	24	-	393	15	-
*Mich St Univ A & AS...	1547	171	86	242	67	13
*Univ Detroit.....	1837	67		263	2	-
*Univ Mich.....	3073	670	399	640	346	53
*Wayne St Univ.....	1303	292	17	165	55	-
Western Mich Univ.....	65	-	-	6	-	-
MINNESOTA	2484	415	219	412	93	10
*Univ Minn.....	2484	415	219	412	93	10
MISSISSIPPI	1623	44	-	330	15	-
*Miss St Univ.....	1306	39	-	269	10	-
*Univ Miss.....	317	5	-	61	5	-

See footnotes at end of table.

Table C.--Total engineering enrollments and degrees by level, State and institution: 1961--Cont.

(- = Zero)

Institution	Enrollments Fall 1961			Degrees 1960-61		
	B.S.	M.S.	Ph.D.	B.S.	M.S.	Ph.D.
MISSOURI	5562	770	102	1039	156	11
*Missouri Mines	2740	143	17	483	50	1
*Missouri Univ	1383	80	18	233	31	3
*St Louis Univ	639	296	12	129	23	1
Univ of Kansas City	101	-	-	3	-	-
*Wash Univ (St L)	699	251	55	191	52	6
MONTANA	1136	37	8	140	26	1
*Montana Mines	243	5	-	21	-	-
*Montana St Col	893	32	8	119	26	1
NEBRASKA	1779	71	6	250	31	-
*Univ Nebr	1185	71	6	183	31	-
Mun Univ Omaha	594	-	-	67	-	-
NEVADA	486	20	-	68	1	-
*Univ Nevada	486	20	-	68	1	-
NEW HAMPSHIRE	652	26	-	180	6	-
*Dartmouth Col	99	8	-	58	2	-
New England Col	88	-	-	23	-	-
*Univ New Hamp	465	18	-	99	4	-
NEW JERSEY	7960	1517	175	894	386	21
*Fairleigh Dickinson U	2448	-	-	150	-	-
Monmouth Col	294	-	-	6	-	-
*Newark	3051	651	21	399	130	-
*Princeton	470	119	97	86	84	19
*Rutgers, The St Univ	835	77	15	112	22	-
*Stevens	862	670	42	141	150	2
NEW MEXICO	2227	521	75	263	76	2
Eastern N Mex Univ	31	-	-	2	-	-
N Mex Inst Mining	168	-	-	18	-	-
*N Mex St Univ	1264	155	7	129	27	-
*Univ N Mex	764	366	68	114	49	2
NEW YORK	19806	6147	1176	2999	1171	102
*Alfred Univ 3/	331	14	17	58	10	1
*City Col of N Y	4406	647	-	512	70	-
*Clarkson	958	32	3	176	10	-
*Columbia Univ	446	498	201	90	199	31
*Cooper Union	694	-	-	93	-	-
*Cornell Univ	1930	188	143	274	86	22
*Manhattan	1121	-	-	180	-	-
*N Y Univ	1217	1041	171	287	352	16
*Poly Inst Brooklyn	2492	1314	323	377	134	14
*Pratt Inst	569	29	-	46	3	-
*Rensselaer	2001	789	215	444	197	13
State Univ of N Y 4/	(696)	(14)	(17)	(108)	(10)	(1)
SUNY Long Is. Center	99	-	-	-	-	-
SUNY Maritime Col	266	-	-	50	-	-
*Syracuse	550	1198	76	102	56	5
*Union Col	415	80	-	58	8	-
U S Mer Marine Acad	508	-	-	111	-	-
Univ Buffalo	1457	216	8	92	27	-
*Univ Rochester	272	92	19	39	15	-
*Webb Inst Naval Arch	74	9	-	10	4	-
NORTH CAROLINA	4141	265	84	699	63	4
*Duke Univ	451	45	7	101	15	-
N C Ag & Tech Col	415	-	-	36	-	-
*N C St Col of Ag & Engin	3275	206	74	562	43	4
Univ N C	-	14	3	-	5	-
NORTH DAKOTA	1333	47	-	283	21	-
*N Dak Ag Col	813	30	-	149	14	-
*Univ N Dak	520	17	-	134	7	-
OHIO	13064	1449	337	1525	331	31
*A F Inst Tech	85	200	-	38	104	-
*Antioch Col	54	-	-	11	-	-
*Case Inst	759	297	84	191	56	8
*Penn Col	1506	-	-	115	-	-
*Ohio No Univ	209	-	-	51	-	-
*Ohio St Univ	2737	528	234	340	129	18
*Ohio Univ	969	20	-	162	6	-

Institution	Enrollments Fall 1961			Degrees 1960-61		
	B.S.	M.S.	Ph.D.	B.S.	M.S.	Ph.D.
OHIO (Cont.)						
*Univ Akron	445	102	-	56	7	-
*Univ Cincinnati	3032	167	19	254	19	5
*Univ Dayton	987	38	-	106	-	-
*Univ Toledo	1053	97	-	79	10	-
*Youngstown Univ	1228	-	-	122	-	-
OKLAHOMA	4268	553	91	847	169	12
Okla City Univ	91	-	-	15	-	-
*Okla St U A & AS	1873	240	64	347	101	8
*Univ Okla	1705	227	27	406	58	4
*Univ Tulsa	599	86	-	79	10	-
OREGON	1548	75	18	252	25	-
*Oregon St Univ	1388	75	18	231	25	-
Univ Portland	160	-	-	21	-	-
PENNSYLVANIA	15980	3321	581	2676	510	82
*Bucknell Univ	424	16	-	81	3	-
*Carnegie Inst Tech	1779	270	137	262	90	24
*Drexel	4092	918	-	479	118	-
Gannon	301	-	-	32	-	-
Geneva Col	331	-	-	43	-	-
Grove City Col	281	-	-	39	-	-
*Lafayette	541	-	-	146	-	-
*Lehigh Univ	1264	179	75	272	56	10
Pa Mil Col	633	-	-	46	-	-
*Pa St Univ	2884	251	77	564	67	13
Phila Text Inst	104	-	-	27	-	-
*Swarthmore	77	-	-	13	-	-
*Univ Pa	428	1171	195	106	110	19
*Univ Pittsburgh	1617	276	97	388	60	16
*Villanova	1224	240	-	178	6	-
RHODE ISLAND	906	65	33	163	24	1
*Brown Univ	225	34	30	21	15	1
R I Sch Design	7	-	-	12	-	-
*Univ R I	674	31	3	130	9	-
SOUTH CAROLINA	2662	48	-	379	17	-
*Citadel	386	-	-	70	-	-
*Clemson	1578	28	-	198	12	-
S C St Col	1	-	-	10	-	-
*Univ S C	697	20	-	101	5	-
SOUTH DAKOTA	1358	24	-	312	10	-
*S Dak Mines	725	13	-	144	2	-
*S Dak St Col A & M	633	11	-	168	8	-
TENNESSEE	4591	300	11	644	50	3
Christian Bros Col	435	-	-	56	-	-
Tenn Ag & Ind	277	-	-	24	-	-
Tenn Poly	919	-	-	77	-	-
Univ Chattanooga	238	-	-	36	-	-
*Univ Tenn	2062	291	5	326	45	3
*Vanderbilt	660	9	6	125	5	-
TEXAS	12742	1075	243	1799	383	17
Arlington St Col	1647	-	-	24	-	-
*Lamar St Tech	1045	-	-	109	-	-
Letourneau Tech Inst	115	-	-	17	-	-
Prairie View	227	-	-	22	-	-
*Rice Univ	573	70	48	50	20	1
*Southern Meth	485	502	-	142	134	-
*Tex A & M	2282	142	54	414	95	3
Tex Col A & I	372	6	-	74	2	-
*Tex Tech Col	1724	46	-	290	18	-
*Tex Western	664	-	-	45	-	-
*Univ Houston	1230	117	11	122	14	-
*Univ Tex	2378	192	130	490	100	13
UTAH	2502	282	53	340	40	11
*Brigham Young Univ	729	12	-	59	-	-
*Univ Utah	1149	234	36	200	19	9
*Utah St U of A & AS	588	36	17	78	21	2
Westminster Col	36	-	-	3	-	-

See footnotes at end of table.

Table C.--Total engineering enrollments and degrees by level, State and institution: 1961--Cont.

(- = Zero)

Institution	Enrollments Fall 1961			Degrees 1960-61		
	B.S.	M.S.	Ph.D.	B.S.	M.S.	Ph.D.
VERMONT	638	16	-	110	5	-
*Norwich Univ.	311	-	-	54	-	-
*Univ Vermont	327	16	-	56	5	-
VIRGINIA	4455	378	34	696	85	6
Hampton Inst	22	-	-	8		-
Inst of Text Tech	-	20	-	-	6	-
*Univ Virginia	684	160	14	126	22	-
*Va Mil Inst	417	-	-	90	-	-
*Va Poly Inst	3332	198	20	472	57	6
WASHINGTON	4091	700	116	723	116	9
Gonzaga Univ	256	-	-	44	-	-
St Martin's Col	46	-	-	5	-	-
Seattle Univ	409	172		44	8	-
*Univ Washington	2208	486	116	463	92	9
Walla Walla Col	81	-	-	14	-	-
*Wash St Univ	1091	42	-	153	16	-
WEST VIRGINIA	1775	60	13	253	32	1
Davis-Elkins Col	5/	-	-	6	-	-
Marshall Univ	266	-	-	29	-	-
WEST VIRGINIA (Cont.)						
W Va Inst Tech	362	-	-	40	-	-
*W Va Univ	1147	60	13	178	32	1
WISCONSIN	6729	514	164	954	123	39
*Marquette	1403	94	-	225	3	-
Milwaukee Sch Engr	1431	-	-	169	-	-
*Univ Wisconsin	3512	420	164	500	120	39
Wis St Col & Inst Tech	383	-	-	60	-	-
WYOMING	791	41	-	157	8	-
*Univ Wyoming	791	41	-	157	8	-
PUERTO RICO	1875	-	-	168	-	-
*Univ Puerto Rico	1875	-	-	168	-	-

* Accredited in at least one curriculum by the Engineers' Council for Professional Development.

1/ Engineering program began in Fall 1961.

2/ This institution was not included in the Education Directory, Part III, Higher Education, 1960-61 and therefore was not included in the 1960-61 survey of degrees.

3/ Includes data for the College of Ceramics at Alfred, a contract college of the State University of New York, which was listed separately as "Alfred University SUNY" in publications prior to Fall 1959.

4/ Includes also data for the College of Ceramics at Alfred University.

5/ Engineering program discontinued.

Table D.--Engineering enrollments and degrees by level, curriculum, state and institution: 1961
(— = zero)

AERONAUTICAL, AGRICULTURAL

Institution	Enrollments Fall 1961			Degrees 1960-61		
	B.S.	M.S.	Ph.D.	B.S.	M.S.	Ph.D.
AERONAUTICAL (TOTAL)	8215	1382	391	1666	437	42
Alabama	209	1	-	61	1	-
*Auburn Univ	81	-	-	40	-	-
*Univ Ala	128	1	-	21	1	-
Arizona	113	20	7	2	9	-
Univ Arizona	113	20	7	2	9	-
California	1095	281	105	488	78	10
*Calif Inst Tech 1/	-	52	25	-	25	10
Calif State Poly	(256)	-	-	(43)	-	-
Kellogg V. Campus	79	-	-	5	-	-
San Luis Ob Campus	177	-	-	38	-	-
Northrop Inst Tech	633	-	-	373	-	-
San Diego St Col	79	1	-	-	-	-
Stanford Univ	-	83	55	-	20	-
Univ Calif (Berkeley)	-	17	20	-	-	-
*Univ Sou Calif 2/	37	119	5	15	30	-
*U S Naval PG Sch	90	9	-	57	3	-
Colorado	263	61	4	41	7	-
*Univ Colo	263	61	4	41	7	-
District of Columbia	-	22	10	1	1	-
Catholic Univ	-	22	10	1	1	-
Florida	48	2	-	21	-	-
*Univ Florida 3/	48	2	-	21	-	-
Georgia	481	19	1	55	6	-
*Ga Inst Tech 3/	481	19	1	55	6	-
Illinois	464	15	10	58	9	1
Aero-Space Inst	50	-	-	-	-	-
*Univ Ill 4/	414	15	10	58	9	1
Indiana	567	25	20	103	9	3
Ind Tech Col	137	-	-	-	-	-
*Purdue Univ	178	19	18	81	8	3
Tri-State Col	91	-	-	-	-	-
*Univ Notre Dame	161	6	2	22	1	-
Iowa	292	4	8	35	2	-
*Iowa St Univ Sci & Tech	292	4	8	35	2	-
Kansas	282	78	-	87	8	-
*Univ Kansas	105	8	-	43	3	-
*Univ Wichita 5/	177	70	-	44	5	-
Maryland	170	21	11	20	3	1
Johns Hopkins Univ	-	-	2	-	-	1
*Univ Maryland	170	21	9	20	3	-
Massachusetts	253	86	41	71	88	7
Boston Univ	97	-	-	25	-	-
*Mass Inst Tech 3/ 4/	156	86	41	46	88	7
Michigan	400	79	24	84	46	2
*Univ Detroit 6/	155	-	-	26	-	-
*Univ Michigan	232	78	24	50	46	2
*Wayne St Univ 5/	13	1	-	8	-	-
Minnesota	300	24	12	41	7	-
*Univ Minn	300	24	12	41	7	-
Mississippi	114	8	-	19	3	-
*Miss St Univ 3/	114	8	-	19	3	-
Missouri	205	-	-	37	-	-
St. Louis Univ	205	-	-	37	-	-
New Jersey	89	42	24	11	23	7
*Princeton Univ	89	42	24	11	23	7
New York	542	148	63	78	30	8
Columbia Univ	2	-	-	-	-	-
*Cornell Univ	-	14	13	-	7	3
*N Y Univ 5/	113	30	15	21	10	2
*Poly Inst Brooklyn 5/	234	85	26	29	7	-
*Rensselaer Poly Inst 4/	181	19	9	23	5	3
*Syracuse Univ 2/	12	-	-	5	1	-
North Carolina	292	-	-	23	-	-
*N C St Col Ag & Engr 2/	292	-	-	23	-	-
North Dakota	27	-	-	-	-	-
N Dak St Univ	27	-	-	-	-	-
Ohio	359	140	21	56	39	1
*A F Inst Tech	39	55	-	16	27	-
Case Inst	-	4	1	-	3	-
*Ohio St Univ	182	51	20	23	6	1
*Univ Cincinnati 6/ 7/	138	30	-	17	3	-
Oklahoma	225	50	-	54	7	-
*Univ Okla 7/	170	50	-	46	7	-
Univ Tulsa	53	-	-	8	-	-
Pennsylvania	238	42	5	45	8	2
Drexel Inst Tech	-	25	-	-	-	-
AERONAUTICAL (Cont.)						
Pennsylvania (Cont.)						
*Pa St Univ	170	15	5	45	8	2
*Univ Pittsburgh 2/	68	2	-	-	-	-
Rhode Island	-	-	-	1	-	-
*Brown Univ	-	-	-	1	-	-
Texas	598	68	8	83	31	-
Arlington St Col	96	-	-	-	-	-
Southern Meth Univ	28	45	-	10	20	-
*Texas A & M	223	13	-	31	7	-
Texas Western Col	1	-	-	-	-	-
*Univ Texas	250	10	8	42	4	-
Virginia	333	57	1	35	12	-
*Univ Virginia	82	22	-	13	2	-
*Va Poly Inst 3/	251	35	1	22	10	-
Washington	117	85	16	35	9	-
*Univ Wash	117	85	16	35	9	-
West Virginia	139	4	-	21	1	-
*W Va Univ 7/	139	4	-	21	1	-
AGRICULTURAL (TOTAL)	1927	227	99	435	95	17
Alabama	39	2	2	4	2	-
*Auburn Univ	39	2	2	4	2	-
Arizona	7	1	-	1	-	-
Univ Arizona	7	1	-	1	-	-
Arkansas	38	1	-	16	1	-
Ark St Col	25	-	-	7	-	-
*Univ Ark	13	1	-	9	1	-
California	264	19	21	21	6	1
Calif State Poly (San Luis Ob Campus)	100	-	-	16	-	-
Fresno St Col	8	-	-	2	-	-
Univ Calif	(156)	(19)	(21)	(3)	(6)	(1)
*Berkeley Campus 3/	-	-	2	-	-	-
Davis Campus	156	19	19	3	6	1
Colorado	34	4	-	10	2	-
*Colo St Univ	34	4	-	10	2	-
Delaware	-	-	-	1	-	-
Univ Delaware	-	-	-	1	-	-
Florida	13	-	-	13	2	-
Univ Florida	13	-	-	13	2	-
Georgia	64	-	-	18	4	-
*Univ Georgia	64	-	-	18	4	-
Idaho	36	3	-	13	1	-
*Univ Idaho	36	3	-	13	1	-
Illinois	78	14	-	20	4	-
*Univ Ill	78	14	-	20	4	-
Indiana	44	5	10	16	3	4
*Purdue Univ	44	5	10	16	3	4
Iowa	133	10	12	20	4	4
*Iowa St Univ of Sci & Tech	133	10	12	20	4	4
Kansas	51	10	-	22	1	-
*Kan St Univ A & AS	51	10	-	22	1	-
Kentucky	31	5	-	4	-	-
Univ Kentucky	31	5	-	4	-	-
Louisiana	49	11	-	15	2	-
*La roly Inst	17	2	-	6	-	-
*La St Univ & A & M Col	20	9	-	7	2	-
Univ S W La	12	-	-	2	-	-
Maine	29	5	-	6	-	-
*Univ Maine	29	5	-	6	-	-
Maryland	9	2	1	1	-	-
Univ Maryland	9	2	1	1	-	-
Michigan	71	14	22	13	8	3
*Mich St Univ Agr & App Sci	71	14	22	13	8	3
Minnesota	36	8	4	9	3	-
*Univ Minn	36	8	4	9	3	-
Mississippi	18	-	-	4	-	-
*Miss St Univ 3/	18	-	-	4	-	-
Missouri	38	4	6	28	4	2
*Mo Univ	38	4	6	28	4	2
Montana	45	-	-	4	-	-
Mont St Col	45	-	-	4	-	-
Nebraska	36	4	-	8	3	-
*Univ Nebr	36	4	-	8	3	-

See footnotes at end of table.

Table D.—Engineering enrollments and degrees by level, curriculum, state and institution: 1961--Cont.

(– = zero)

AGRICULTURAL, ARCHITECTURAL, BUILDING & CONSTRUCTION, CERAMIC, CHEMICAL

Institution	Enrollments Fall 1961			Degrees 1960-61		
	B.S.	M.S.	Ph.D.	B.S.	M.S.	Ph.D.
AGRICULTURAL (Cont.)						
New Hampshire	9	1	-	-	-	-
Univ N Hamp	9	1	-	-	-	-
New Jersey	4	-	-	1	2	-
*Rutgers, The St Univ	4	-	-	1	2	-
New Mexico	15	-	-	-	-	-
*N Mex St Univ	15	-	-	-	-	-
New York	47	6	7	8	4	-
*Cornell Univ	47	6	7	8	4	-
North Carolina	72	9	10	10	3	1
N C Agr & Tech Col	14	-	-	2	-	-
*N C St Col Ag & Engr	58	9	10	8	3	1
North Dakota	69	5	-	18	3	-
*N Dak St Univ	69	5	-	18	3	-
Ohio	33	19	-	16	2	-
*Ohio St Univ	32	19	-	16	2	-
Youngstown Univ	1	-	-	-	-	-
Oklahoma	37	8	4	9	3	-
*Okla St Univ A & AS	37	8	4	9	3	-
Oregon	18	1	-	1	2	-
*Oregon St Univ	18	1	-	1	2	-
Pennsylvania	44	9	-	9	4	-
*Pa St Univ	44	9	-	9	4	-
South Carolina	67	7	-	12	3	-
*Clemson Agr Col	67	7	-	12	3	-
South Dakota	22	4	-	13	2	-
*S D St Col A & M A	22	4	-	13	2	-
Tennessee	35	1	-	-	3	-
Univ Tenn	35	1	-	-	3	-
Texas	105	15	-	33	3	-
*Texas A & M	57	15	-	21	3	-
Texas Tech Col	48	-	-	12	-	-
Utah	-	-	-	-	2	2
Utah St Univ A & AS	-	-	-	-	2	2
Vermont	20	-	-	3	-	-
Univ Vermont	20	-	-	3	-	-
Virginia	53	7	-	11	2	-
*Va Poly Inst	53	7	-	11	2	-
Washington	47	8	-	8	2	-
*Wash St Univ	47	8	-	8	2	-
West Virginia	18	1	-	2	2	-
*W Va Univ	18	1	-	2	2	-
Wisconsin	30	3	-	11	3	-
Univ Wisc	30	3	-	11	3	-
Wyoming	19	1	-	3	-	-
Univ Wyoming	19	1	-	3	-	-
ARCHITECTURAL (TOTAL)	2303	42	-	312	8	-
California	357	-	-	43	-	-
Calif St Poly (San Luis Ob Campus)	357	-	-	43	-	-
Colorado	134	-	-	11	-	-
*Univ Colo	134	-	-	11	-	-
Florida	125	-	-	16	-	-
Univ Miami	125	-	-	16	-	-
Illinois	277	4	-	42	2	-
Univ Ill	277	4	-	42	2	-
Iowa	267	6	-	12	-	-
*Iowa St U Sci & Tech	267	6	-	12	-	-
Kansas	101	7	-	15	1	-
*Kans St Univ A & AS	57	3	-	9	1	-
*Univ Kansas	44	4	-	6	-	-
Louisiana	31	-	-	9	-	-
La St U & A & M Col	-	-	-	8	-	-
Southern Univ & A & M Col	31	-	-	1	-	-
Michigan	168	-	-	41	-	-
Detroit Inst Tech	6	-	-	1	-	-
Lawrence Inst Tech	160	-	-	18	-	-
*Univ Detroit 6/	2	-	-	22	-	-
Missouri	19	-	-	9	-	-
*Wash Univ (St L)	19	-	-	9	-	-
Montana	6	-	-	6	-	-
*Mont St Col	6	-	-	5	-	-
North Carolina	78	-	-	5	-	-
N C Ag & Tech Col	78	-	-	5	-	-
North Dakota	16	-	-	9	-	-
*N D St Univ	16	-	-	9	-	-
Ohio	-	-	-	4	-	-
Ohio Univ	-	-	-	4	-	-
Oklahoma	63	5	-	12	1	-

Institution	Enrollments Fall 1961			Degrees 1960-61		
	B.S.	M.S.	Ph.D.	B.S.	M.S.	Ph.D.
ARCHITECTURAL (Cont.)						
Oklahoma (Cont.)						
*Okla St Univ A & AS	63	5	-	10	1	-
*Univ Okla	-	-	-	2	-	-
Pennsylvania	68	5	-	13	-	-
*Pa St Univ	68	5	-	11	-	-
Univ Pa	-	-	-	2	-	-
South Carolina	-	-	-	3	-	-
S C St Col	-	-	-	3	-	-
Tennessee	53	-	-	-	-	-
Tenn A & I St Univ	53	-	-	-	-	-
Texas	256	11	-	41	2	-
Prairie View A & M	53	-	-	6	-	-
Texas Tech Col	89	1	-	5	-	-
Texas Western Col	3	-	-	-	-	-
*Univ Texas	117	10	-	30	2	-
Virginia	74	3	-	11	1	-
*Va Poly Inst	74	3	-	11	1	-
Washington	159	1	-	6	1	-
*Wash St Univ	159	1	-	6	1	-
Wyoming	51	-	-	4	-	-
Univ Wyoming	51	-	-	4	-	-
BUILDING AND CONSTRUCTION (Total)	258	17	3	55	11	-
Arkansas	13	-	-	-	-	-
John Brown Univ	13	-	-	-	-	-
Massachusetts	-	16	3	-	11	-
Mass Inst Tech	-	16	3	-	11	-
Michigan	-	1	-	-	-	-
Univ Mich	-	1	-	-	-	-
North Carolina	158	-	-	34	-	-
*N C St Col Ag & Engr 8/	158	-	-	34	-	-
Virginia	87	-	-	21	-	-
Hampton Inst	22	-	-	4	-	-
Va Poly Inst	65	-	-	17	-	-
CERAMIC (TOTAL)	910	84	77	167	32	13
California	7	7	17	7	2	-
*Univ Calif (Berkeley) 3/	7	7	17	7	2	-
Georgia	49	4	-	14	-	-
*Ga Inst Tech	49	4	-	14	-	-
Illinois	107	9	9	12	2	4
*Univ Illinois	107	9	9	12	2	4
Iowa	20	7	-	7	-	1
*Iowa St U Sci & Tech	20	7	-	7	-	1
Massachusetts	-	4	12	-	3	3
Mass Inst Tech	-	4	12	-	3	3
Mississippi	11	3	-	-	-	-
Miss St Univ	11	3	-	-	-	-
Missouri	63	4	2	10	1	-
*Missouri Mines	63	4	2	10	1	-
New Jersey	32	1	-	8	4	-
*Rutgers, The St Univ	32	1	-	8	4	-
New York	331	14	17	58	10	1
*Alfred Univ	331	14	17	58	10	1
North Carolina	22	8	5	8	-	1
*N C St Col Ag & Engr	22	8	5	8	-	1
Ohio	71	8	8	4	2	3
*Ohio St Univ	71	8	8	4	2	3
South Carolina	107	1	-	16	4	-
*Clemson Agr Col	107	1	-	16	4	-
Texas	1	-	-	5	-	-
*Univ Texas	1	-	-	5	-	-
Utah	20	4	6	6	-	-
Univ Utah	20	4	6	6	-	-
Virginia	18	1	-	4	1	-
*Va Poly Inst	18	1	-	4	1	-
Washington	51	9	1	8	3	-
*Univ Wash	51	9	1	8	3	-
CHEMICAL (TOTAL)	17094	2184	1130	2864	650	171
Alabama	290	11	-	46	4	-
*Auburn Univ	184	7	-	36	3	-
*Univ Ala	106	4	-	10	1	-
Arizona	157	7	-	7	-	-
Ariz St Univ	74	1	-	-	-	-
Univ Ariz	83	6	-	7	-	-
Arkansas	164	6	-	26	4	-
*Univ Ark	164	6	-	26	4	-

See footnotes at end of table.

Table D.—Engineering enrollments and degrees by level, curriculum, state and institution: 1961—Cont.

(– = zero)

CHEMICAL

Institution	Enrollments Fall 1961			Degrees 1960-61			Institution	Enrollments Fall 1960			Degrees 1960-61		
	B.S.	M.S.	Ph.D.	B.S.	M.S.	Ph.D.		B.S.	M.S.	Ph.D.	B.S.	M.S.	Ph.D.
CHEMICAL (Cont.)							CHEMICAL (Cont.)						
California	195	114	72	80	29	2	New Hampshire	63	1	-	8	-	-
*Calif Inst Tech 1/	28	15	9	7	7	-	Univ N Hamp	63	1	-	8	-	-
San Jose St Col	20	-	-	5	-	-	New Jersey	496	165	51	65	41	6
*Stanford Univ	67	3	9	17	2	-	*Newark Col Engr 5/	388	101	11	48	26	-
*Univ Calif (Berkeley)	-	44	50	36	10	2	*Princeton Univ	86	15	25	17	9	6
Univ Sou Calif	80	52	4	15	10	-	Rutgers, The St Univ	22	-	-	-	-	-
Colorado	199	21	4	31	7	1	Stevens Inst Tech	-	49	15	-	6	-
*Univ Colo	167	14	4	24	5	1	New Mexico	89	3	2	20	4	-
*Univ Denver	32	7	-	7	2	-	N Mex St Univ	54	-	-	6	-	-
Connecticut	75	20	18	19	8	3	Univ N Mex	35	3	2	14	4	-
Univ Conn	44	9	3	-	-	-	New York	2030	386	168	338	77	20
*Yale Univ	31	11	15	19	8	3	*City Col of N Y 5/	508	27	-	61	3	-
Delaware	120	53	17	18	16	4	*Clarkson Col Tech	203	4	3	29	3	-
*Univ Del	120	53	17	18	16	4	*Columbia Univ 9/	25	31	25	25	12	3
District of Columbia	35	1	1	6	-	-	*Cooper Union	86	-	-	16	-	-
Catholic Univ	35	1	1	6	-	-	*Cornell Univ	211	10	18	47	6	4
Florida	53	9	9	18	4	6	Manhattan Col	186	-	-	11	-	-
*Univ Fla 3/	53	9	9	18	4	6	*N Y Univ 5/	86	121	31	22	27	4
Georgia	431	20	23	52	16	4	*Poly Inst Brooklyn 5/	236	95	46	38	13	6
*Ga Inst Tech 3/	431	20	23	52	16	4	*Pratt Inst	68	9	-	7	-	-
Idaho	86	12	-	11	6	-	*Rensselaer Poly Inst 3/	238	15	30	60	7	3
*Univ Idaho	86	12	-	11	6	-	*Syracuse Univ	74	34	6	12	3	-
Illinois	693	90	68	94	28	14	Univ Buffalo	18	22	2	-	-	-
*Ill Inst Tech 3/	242	53	13	31	5	1	*Univ Rochester	91	18	7	10	3	-
*Northwestern Univ 3/	142	27	16	28	13	3	North Carolina	232	14	10	28	3	1
*Univ Ill	309	10	39	35	10	10	*N C St Col Ag & Engr	232	14	10	28	3	1
Indiana	655	53	21	119	25	3	North Dakota	33	5	-	10	2	-
Evansville Col	3	-	-	-	-	-	*Univ N Dak	33	5	-	10	2	-
Ind Tech Col	73	-	-	-	-	-	Ohio	1212	107	58	165	28	10
*Purdue Univ	293	35	19	66	21	3	*Case Inst	95	33	15	34	10	3
*Rose Poly Inst	39	4	-	10	-	-	*Fenn Col 6/ 10/	138	-	-	6	-	-
Tri St Col	75	-	-	-	-	-	*Ohio St Univ	215	53	32	38	17	3
*Univ Notre Dame	172	14	2	43	4	-	Ohio Univ	-	-	-	11	-	-
Iowa	376	34	30	54	13	5	*Univ Cincinnati 6/	460	21	11	55	1	4
*Iowa St U Sci & Tech	296	30	25	46	11	4	*Univ Dayton	117	-	-	14	-	-
*St Univ Iowa	80	4	5	8	2	1	Univ Toledo	110	-	-	2	-	-
Kansas	227	41	17	39	8	1	Youngstown Univ	77	-	-	5	-	-
*Kans St Univ A & AS	133	19	4	22	4	-	Oklahoma	349	58	34	75	13	4
*Univ Kansas	94	22	13	17	4	1	*Okla St Univ A & AS	131	25	12	31	8	1
Kentucky	215	14	4	27	8	2	*Univ Okla	141	17	22	28	3	3
Univ Ky	145	-	-	5	-	-	*Univ Tulsa	77	16	-	16	2	-
*Univ Louisville 3/	70	14	4	22	8	2	Oregon	78	13	9	20	4	-
Louisiana	424	95	16	114	14	4	*Oregon St Univ	78	13	9	20	4	-
*La Poly Inst	135	15	-	29	2	-	Pennsylvania	1533	210	68	314	51	14
*La St Univ & A & M Col	172	65	16	60	11	4	*Bucknell Univ	80	4	-	23	2	-
*Univ of S W La	73	-	-	13	-	-	*Carnegie Inst Tech 5/	232	29	19	49	19	2
*Tulane Univ	44	15	-	12	1	-	*Drexel Inst Tech 6/	412	22	-	48	4	-
Maine	98	7	-	29	5	-	Grove City Col	64	-	-	7	-	-
*Univ Maine	98	7	-	29	5	-	*Lafayette Col	77	-	-	19	-	-
Maryland	269	32	34	25	2	1	*Lehigh Univ	103	25	14	33	11	1
*Johns Hopkins Univ	107	2	17	9	2	1	*Pa St Univ	199	21	13	56	6	1
*Univ Maryland	162	30	17	16	-	-	*Univ Pa	80	54	8	17	2	4
Massachusetts	688	113	70	179	83	18	*Univ Pittsburgh	208	14	14	38	4	6
Lowell Tech Inst	31	-	-	-	-	-	*Villanova Univ	78	41	-	24	3	-
*Mass Inst Tech	160	76	63	74	77	18	Rhode Island	47	4	2	6	3	-
*Northeastern Univ 6/	244	8	-	45	-	-	*Univ R I	47	4	2	6	3	-
*Tufts Univ	65	-	-	17	-	-	South Carolina	269	13	-	27	1	-
*Univ Mass	91	23	-	19	3	-	*Clemson	176	8	-	19	-	-
*Worcester Poly Inst	97	6	7	24	3	-	*Univ S C	93	5	-	8	1	-
Michigan	807	134	84	118	35	11	South Dakota	51	-	-	15	1	-
*Mich M & T	226	-	-	16	2	-	*S Dak Mines	51	-	-	15	1	-
*Mich St Univ A & AS	117	7	1	15	6	1	Tennessee	399	29	8	68	11	3
*Univ Detroit 6/	170	29	-	31	2	-	Christian Bros Col	11	-	-	4	-	-
*Univ Mich	162	54	75	38	16	10	Tenn Poly Inst	42	-	-	6	-	-
*Wayne St Univ 5/	132	44	8	18	9	-	*Univ Tenn 3/	223	25	5	36	9	3
Minnesota	248	23	46	48	8	3	*Vanderbilt Univ	123	4	3	22	2	-
*Univ Minn	248	23	46	48	8	3	Texas	1174	126	65	194	24	5
Mississippi	218	4	-	27	3	-	*Lamar St Col Tech	179	-	-	26	-	-
Miss St Univ	138	-	-	12	-	-	*Rice Univ	50	25	33	15	3	1
*Univ Miss	80	4	-	15	3	-	*Texas A & M	217	13	0	45	6	-
Missouri	527	28	21	84	8	2	Texas Col A & I	49	4	-	11	-	-
*Mo Mines	283	13	7	35	5	1	Texas Tech Col	181	9	-	23	2	-
*Mo Univ	156	3	3	25	-	1	Tex Western Col	8	-	-	-	-	-
*Wash Univ (St Louis)	88	12	11	24	3	-	*Univ Houston	165	36	11	15	1	-
Montana	136	6	5	18	6	1	*Univ Texas	325	39	15	99	12	4
*Mont St Col	136	6	5	18	6	1	Utah	236	7	13	34	1	3
Nebraska	76	5	-	16	5	-	*Brigham Young Univ	112	-	-	14	-	-
*Univ Nebr	76	5	-	16	5	-							

See footnotes at the end of table.

Table D.--Engineering enrollments and degrees by level, curriculum, state and institution: 1961--Cont.

(– = zero)

CHEMICAL, CIVIL

Institution	Enrollments Fall 1961			Degrees 1960-61		
	B.S.	M.S.	Ph.D.	B.S.	M.S.	Ph.D.
CHEMICAL (Cont.)						
Utah (Cont.)						
*Univ Utah	115	7	13	20	1	3
Utah St Univ	9	-	-	-	-	-
Virginia	385	18	13	45	8	3
*Univ Va	95	6	6	14	2	-
*Va Poly Inst 3/	290	12	7	31	6	3
Washington	230	40	30	52	10	5
Gonzaga Univ	28	-	-	6	-	-
Seattle Univ	23	-	-	2	-	-
*Univ Wash	88	34	30	33	6	5
*Wash St Univ	91	6	-	11	4	-
West Virginia	216	7	8	21	9	1
W Va Inst Tech	23	-	-	6	-	-
*W Va Univ	193	7	8	15	9	1
Wisconsin	465	25	31	47	14	11
*Univ Wis	465	25	31	47	14	11
Puerto Rico	45	-	-	7	-	-
Univ P R	45	-	-	7	-	-
CIVIL (TOTAL)	27479	3157	815	5330	1220	117
Alabama	348	14	-	85	4	-
*Auburn Univ	103	9	-	51	3	-
*Univ Ala	135	5	-	34	1	-
Alaska	77	-	-	7	-	-
*Univ Alaska	77	-	-	7	-	-
Arizona	305	38	15	58	6	-
*Ariz St Univ	99	19	-	14	-	-
*Univ Ariz	206	19	15	44	6	-
Arkansas	240	9	-	52	6	-
*Univ Ark	240	9	-	52	6	-
California	1814	453	112	308	174	8
*Calif Inst Tech	-	8	7	-	12	1
Calif St Poly (Kellogg V Campus)	73	-	-	-	-	-
Chico St Col	91	-	-	22	-	-
Univ of Pacific	34	-	-	5	-	-
Fresno St Col	112	-	-	22	-	-
Heald Engr Col	130	-	-	33	-	-
Long Beach St Col	89	-	-	11	-	-
La St Col AA & S	294	-	-	-	-	-
Loyola Univ	51	-	-	5	-	-
Sacramento St Col	136	-	-	23	-	-
San Diego St Col	132	-	-	-	-	-
*San Jose St Col	99	30	-	19	-	-
*Stanford Univ	88	88	51	32	75	2
*Univ Calif (Berkeley) 3/	223	119	51	80	56	5
*Univ Santa Clara	56	34	-	14	-	-
*Univ Sou Calif	206	174	3	42	31	-
Colorado	497	110	43	91	32	2
*Colo St Univ	140	26	28	24	9	1
*Univ Colo	300	77	15	50	23	1
*Univ Denver	57	7	-	17	-	-
Connecticut	77	45	23	41	28	3
*Univ Conn	50	20	8	34	8	-
*Yale Univ	27	25	15	7	20	3
Delaware	76	11	-	10	3	-
*Univ Delaware	76	11	-	10	3	-
District of Columbia	272	29	6	33	1	-
*Catholic Univ	53	29	6	16	1	-
*Geo Wash Univ	88	-	-	7	-	-
*Howard Univ	131	-	-	10	-	-
Florida	404	12	15	57	6	2
*Univ Fla 3/	255	12	15	39	6	2
*Univ Miami	149	-	-	18	-	-
Georgia	416	50	12	61	20	1
*Ga Inst Tech 3/	416	50	12	61	20	1
Hawaii	224	1	-	62	-	-
*Univ Hawaii	224	1	-	62	-	-
Idaho	153	4	-	33	4	-
*Univ Idaho	153	4	-	33	4	-
Illinois	1324	240	138	222	137	30
Bradley Univ	147	4	-	38	-	-
*Ill Inst Tech 3/	337	69	16	35	7	-
*Northwestern Univ 3/	72	55	22	15	28	4
*Univ Ill	768	112	100	134	102	26
Indiana	1048	111	43	126	60	11
Evansville Col	6	-	-	-	-	-
Ind Tech Col	167	-	-	-	-	-
*Purdue Univ	322	98	43	71	54	11

Institution	Enrollments Fall 1961			Degrees 1960-61		
	B.S.	M.S.	Ph.D.	B.S.	M.S.	Ph.D.
CIVIL (Cont.)						
Indiana (Cont.)						
*Rose Poly Inst	38	2	-	11	-	-
Tri-State Col	232	-	-	-	-	-
*Univ Notre Dame	200	11	-	31	6	-
*Valparaiso Univ	83	-	-	13	-	-
Iowa	484	57	15	69	26	6
*Iowa St U of Sci & Tech	375	41	14	48	17	6
*St Univ Iowa	109	16	1	21	9	-
Kansas	324	61	-	88	22	-
*Kans St Univ A & AS.	199	22	-	38	12	-
*Univ Kans	125	39	-	50	10	-
Kentucky	357	32	-	84	7	-
*Univ Ky	315	29	-	73	6	-
*Univ Louisville 3/	42	3	-	11	1	-
Louisiana	404	48	-	97	11	-
*La Poly Inst	110	8	-	19	1	-
*La St Univ & A & M Col 11/	118	21	-	39	4	-
So Univ & A & M Col	27	-	-	3	-	-
*Univ SW La	115	-	-	26	-	-
*Tulane Univ	34	19	-	10	6	-
Maine	111	9	-	38	3	-
*Univ Maine	111	9	-	38	3	-
Maryland	439	12	2	58	3	1
*Johns Hopkins Univ	137	1	-	13	1	1
*Univ Maryland	302	11	2	45	2	-
Massachusetts	696	187	39	196	70	8
Bradford Durfee Col.	28	-	-	4	-	-
*Harvard Univ 9/	-	5	2	-	9	1
Lowell Tech Inst	-	-	-	2	-	-
*Mass Inst Tech	68	89	37	35	40	7
Merrimack Col	54	-	-	7	-	-
*Northeastern Univ 6/	295	71	-	52	11	-
*Tufts Univ	34	-	-	22	-	-
*Univ Mass	105	10	-	28	4	-
*Worcester Poly Inst.	112	12	-	46	6	-
Michigan	1340	88	44	300	71	2
Detroit Inst Tech	65	-	-	11	-	-
Lawrence Inst Tech	120	-	-	14	-	-
*Mich Col M & T	452	4	-	110	2	-
*Mich St Univ A & AS	193	22	13	43	9	-
*Univ Detroit 6/	174	-	-	32	-	-
*Univ Mich	202	37	31	67	52	2
*Wayne St Univ 3/	134	25	-	23	8	-
Minnesota	302	37	6	55	31	2
*Univ Minn	302	37	6	55	31	2
Mississippi	359	6	-	119	3	-
*Miss St Univ 3/	280	5	-	94	2	-
*Univ Miss	79	1	-	25	1	-
Missouri	1168	58	3	206	23	1
St Louis Univ	79	-	-	13	-	-
*Mo Mines	638	25	-	119	13	-
*Mo Univ	356	23	3	56	5	-
*Wash Univ (St L)	95	10	-	18	5	1
Montana	159	2	-	25	3	-
*Mont St Col	159	2	-	25	3	-
Nebraska	172	5	-	40	3	-
*Univ Nebr	172	5	-	40	3	-
Nevada	148	6	-	19	1	-
*Univ Nevada	148	6	-	19	1	-
New Hampshire	197	5	-	56	-	-
*Dartmouth Col 9/	6	-	-	5	-	-
New England Col	88	-	-	23	-	-
*Univ N H	103	5	-	28	-	-
New Jersey	387	75	11	66	39	1
*Newark Col Engr 5/	303	48	-	48	15	-
*Princeton Univ	35	13	7	9	17	1
*Rutgers, The St Univ	49	14	4	9	6	-
Stevens Inst Tech	-	-	-	-	1	-
New Mexico	307	43	4	56	9	-
*New Mex St Univ	219	22	2	21	2	-
*Univ N Mex	88	21	2	35	7	-
New York	1957	408	68	399	124	18
*City Col N Y 5/	460	102	-	85	10	-
*Clarkson Col Tech	154	1	-	25	1	-
*Columbia Univ 9/	19	98	17	11	32	13
*Cooper Union	77	-	-	16	-	-
*Cornell Univ	158	23	16	44	23	-

See footnotes at end of table.

Table D.—Engineering enrollments and degrees by level, curriculum, state and institution: 1961—Cont.

(— = zero)

CIVIL, ELECTRICAL

Institution	Enrollments Fall 1961			Degrees 1960-61		
	B.S.	M.S.	Ph.D.	B.S.	M.S.	Ph.D.
CIVIL (Cont.)						
New York (Cont.)						
*Manhattan Col	256	-	-	35	-	-
*New York Univ 5/	140	86	16	35	20	4
*Poly Inst Brooklyn 5/	247	96	-	39	16	-
*Rennselaer Poly Inst	200	37	19	81	20	1
*Syracuse Univ	73	20	-	13	2	-
*Union Col & Univ	74	-	-	13	-	-
Univ Buffalo	99	5	-	2	-	-
North Carolina	510	43	11	111	19	-
*Duke Univ	73	6	-	24	4	-
*N C St Col Ag & Engr	437	37	11	87	15	-
North Dakota	233	5	-	61	2	-
*N Dak St Univ	162	2	-	27	1	-
*Univ N Dak	71	3	-	34	1	-
Ohio	1260	72	33	202	28	1
*Case Inst	62	19	15	15	5	-
*Fenn Col 6/ 10/	131	-	-	17	-	-
*Ohio Northern Univ	57	-	-	21	-	-
*Ohio St Univ	240	31	16	28	23	1
*Ohio Univ	80	5	-	26	-	-
*Univ Akron 6/	27	-	-	13	-	-
*Univ Cincinnati 6/	275	16	2	33	-	-
*Univ Dayton	143	-	-	14	-	-
*Univ Toledo	98	1	-	20	-	-
*Youngstown Univ 5/	147	-	-	15	-	-
Oklahoma	275	65	11	68	23	-
*Okla St Univ A & AS	139	49	11	45	18	-
*Univ Okla	136	16	-	23	5	-
Oregon	212	18	-	62	8	-
*Oregon St Univ	212	18	-	62	8	-
Pennsylvania	1458	210	58	293	55	9
*Bucknell Univ	88	3	-	16	-	-
*Carnegie Inst Tech 5/	237	40	28	27	13	4
*Drexel Inst Tech 6/	403	29	-	48	9	-
Geneva Col	3	-	-	-	-	-
*Lafayette Col	65	-	-	26	-	-
*Lehigh Univ	85	41	22	24	17	5
Pa Military Col	49	-	-	5	-	-
*Pa St Univ	211	4	3	53	3	-
*Swarthmore Col	8	-	-	5	-	-
*Univ Pa	44	39	4	13	7	-
*Univ Pittsburgh	147	23	1	43	3	-
*Villanova Univ	118	31	-	33	3	-
Rhode Island	81	5	-	23	1	-
*Brown Univ	3	-	-	5	-	-
*Univ R I	78	5	-	18	1	-
South Carolina	608	2	-	97	-	-
*Citadel	223	-	-	49	-	-
*Clemson Agric Col	264	2	-	31	-	-
S C St Col	-	-	-	1	-	-
*Univ S C	121	-	-	16	-	-
South Dakota	170	3	-	86	1	-
*S Dak Mines	96	1	-	40	-	-
*S D St Col A & MA	74	2	-	46	1	-
Tennessee	669	38	-	118	8	-
Christian Bros Col	3	-	-	-	-	-
Tenn A & I St Univ	52	-	-	15	-	-
Tenn Poly Inst	202	-	-	13	-	-
*Univ Tenn 3/	263	38	-	52	8	-
*Vanderbilt Univ	149	-	-	38	-	-
Texas	1535	131	37	252	64	3
Arlington St Col	192	-	-	-	-	-
*Lamar St Col Tech	125	-	-	15	-	-
Prairie View A & M	28	-	-	3	-	-
*Rice Univ	11	12	1	4	4	-
*Southern Meth Univ 6/	77	44	-	15	9	-
*Texas A & M	344	41	15	96	33	1
*Texas Tech Col	189	46	-	37	4	-
Texas Western Col	137	-	-	11	-	-
*Univ Houston	164	11	-	14	1	-
*Univ Texas	268	17	21	57	13	2
Utah	455	35	17	71	16	-
*Brigham Young Univ	141	3	-	10	-	-
*Univ Utah	152	15	-	25	5	-
*Utah St Univ A & AS	162	17	17	36	11	-
Vermont	203	-	-	37	-	-
*Norwich Univ	107	-	-	21	-	-
*Univ Vermont	96	-	-	16	-	-
Virginia	916	49	-	166	7	-
*Univ Va	101	17	-	23	2	-
*Va Mil Inst	287	-	-	73	-	-
*Va Poly Inst 3/	528	32	-	70	5	-
Washington	570	63	18	136	18	1
Gonzaga Univ	71	-	-	9	-	-
St Martins Col	46	-	-	5	-	-
Seattle Univ	65	-	-	8	-	-
*Univ Wash	157	56	18	65	15	1
Walla Walla Col	19	-	-	2	-	-
*Wash St Univ	212	7	-	47	3	-
West Virginia	213	15	3	29	5	-
W Va Inst Tech	13	-	-	-	-	-
*W Va Univ	200	15	3	29	5	-
Wisconsin	1185	69	28	194	31	7
*Marquette Univ 5/ 3/	398	-	-	72	-	-
*Univ Wis	501	69	28	81	31	7
Wis St Col & Inst Tech	286	-	-	41	-	-
Wyoming	121	8	-	49	4	-
*Univ Wyoming	121	8	-	49	4	-
Puerto Rico	219	-	-	58	-	-
*Univ P R	219	-	-	53	-	-
ELECTRICAL (TOTAL)	65942	11163	2162	10200	2414	250
Alabama	1021	21	2	203	2	-
*Auburn Univ	381	15	-	147	2	-
Tuskegee Inst	125	-	-	9	-	-
*Univ Ala	515	6	2	47	-	-
Alaska	55	-	-	3	-	-
*Univ Alaska	55	-	-	3	-	-
Arizona	947	143	18	132	49	2
*Ariz St Univ	398	92	4	31	14	-
*Univ Ariz	549	51	14	101	35	2
Arkansas	363	9	6	76	12	-
John Brown Univ	32	-	-	2	-	-
*Univ Ark	331	9	6	74	12	-
California	2938	1224	289	610	356	47
*Calif Inst Tech	-	40	38	-	46	3
Calif St Poly (San Luis Ob Campus)	132	-	-	25	-	-
Chico St Col	70	-	-	7	-	-
Univ of Pacific	20	-	-	-	-	-
Fresno St Col	86	-	-	10	-	-
Heald Engr Col	70	-	-	17	-	-
Long Beach St Col.	154	-	-	10	-	-
La St Col AA & S	426	-	-	-	-	-
Loyola Univ	126	-	-	37	-	-
Sacramento St Col.	55	-	-	-	-	-
San Diego St Col	198	6	-	-	-	-
*San Jose St Col	251	218	-	56	6	-
*Stanford Univ	221	161	124	81	138	32
*U S Nav PG Sch 12/	135	46	4	80	37	1
Univ Calif	(541)	(150)	(101)	(173)	(50)	(11)
*Berkeley Campus 3/	475	150	101	173	50	11
Santa Barbara	66	-	-	-	-	-
*Univ Santa Clara	121	143	-	27	-	-
*Univ Sou Calif	332	460	22	87	79	-
Colorado	1117	94	10	158	9	1
*Colo St Univ	158	2	-	32	1	-
*Univ Colo	833	73	10	107	7	1
*Univ Denver	126	19	-	19	1	-
Connecticut	535	139	29	102	28	6
Hillyer Col	98	-	-	1	-	-
New Haven Col	23	-	-	-	-	-
Trinity Col	2	-	-	5	-	-
Univ Bridgeport	188	-	-	14	-	-
*Univ Conn	132	100	2	54	14	-
*Yale Univ	92	39	27	28	14	6
Delaware	176	16	-	18	4	-
*Univ Del	176	16	-	18	4	-
District of Columbia	647	87	7	90	8	-
*Catholic Univ	105	87	7	17	8	-
*Geo Wash Univ	289	-	-	31	-	-

See footnotes at end of table.

Table D.--Engineering enrollments and degrees by level, curriculum, state and institution: 1961--Cont.

(– = zero)

ELECTRICAL

Institution	Enrollments Fall 1961			Degrees 1960-61		
	B.S.	M.S.	Ph.D.	B.S.	M.S.	Ph.D.
ELECTRICAL (Cont.)						
District of Columbia (Cont.)						
*Howard Univ	253	–	–	43	–	–
Florida	1203	69	23	185	12	5
*Univ Fla 3/ 13/	913	69	23	148	12	5
Univ Miami	290	–	–	37	–	–
Georgia	1121	60	13	125	30	3
*Ga Inst Tech 3/	1121	60	13	125	30	3
Hawaii	190	5	–	15	–	–
Univ Hawaii	190	5	–	15	–	–
Idaho	250	10	–	45	7	–
*Univ Idaho	250	10	–	45	7	–
Illinois	3228	372	178	422	140	25
*Bradley Univ	176	9	–	10	1	–
*Ill Inst Tech 3/	1256	150	36	136	18	2
*Northwestern Univ 3/	202	67	18	35	22	6
*Univ Ill	1594	146	124	241	99	17
Indiana	2283	149	91	425	77	13
Evansville Col 12/	123	–	–	20	–	–
Ind Tech Col	331	–	–	–	–	–
*Purdue Univ	944	104	87	314	61	13
*Rose Poly Inst	73	1	–	16	–	–
Tri State Col	400	–	–	–	–	–
*Univ Notre Dame	247	44	4	51	16	–
*Valparaiso Univ	165	–	–	24	–	–
Iowa	942	77	45	149	20	3
*Iowa St U Sci & Tech	768	37	40	115	11	1
*St Univ Iowa	174	40	5	34	9	2
Kansas	924	121	12	188	19	1
*Kans St Univ	414	23	–	112	7	–
*Univ Kans	305	64	12	64	9	1
*Univ Wichita 5/	205	34	–	12	3	–
Kentucky	449	49	–	88	6	–
*Univ Ky	346	41	–	60	3	–
*Univ Louisville 3/	103	8	–	28	3	–
Louisiana	881	46	–	128	7	–
*La Poly Inst	271	16	–	19	2	–
*La St Univ & A&M Col	284	21	–	63	4	–
Sou Univ & A&M Col	53	–	–	4	–	–
*Univ S W La	210	2	–	27	–	–
*Tulane Univ	63	7	–	15	1	–
Maine	135	3	–	32	1	–
*Univ Maine	135	3	–	32	1	–
Maryland	1473	175	81	174	17	5
*Johns Hopkins Univ	776	78	55	82	5	3
*Univ Maryland	697	97	26	92	12	2
Massachusetts	2926	770	152	572	260	29
Bradford Durfee Col	78	–	–	13	–	–
*Harvard Univ 9/	6	7	13	–	27	4
Lowell Tech Inst	197	3	–	44	–	–
*Mass Inst Tech 3/	677	236	136	158	145	25
Merrimack Col	313	–	–	16	–	–
New Bedford Inst Tech	77	–	–	20	–	–
*Northeastern Univ 6/	984	469	3	154	81	–
*Tufts Univ	83	–	–	47	–	–
*Univ Mass	266	35	–	49	–	–
*Worcester Poly Inst	245	20	–	71	7	–
Michigan	3432	247	96	499	91	18
Detroit Inst Tech	124	–	–	17	–	–
Gen Motors Inst	342	–	–	–	–	–
Lawrence Inst Tech	502	–	–	50	–	–
*Mich Col of M&T	469	2	–	60	1	–
*Mich St Univ A & AS	410	72	18	97	20	6
*Univ Detroit 6/	502	–	–	75	–	–
*Univ Mich	641	117	78	147	66	12
*Wayne St Univ 5/	442	56	–	53	4	–
Minnesota	855	136	48	115	20	1
*Univ Minn	855	136	48	115	20	1
Mississippi	420	11	–	72	5	–
*Miss St Univ 3/	378	11	–	64	5	–
Univ Miss	42	–	–	8	–	–
Missouri	1538	231	17	260	30	2
*Mo Mines	691	24	1	93	5	–
*Mo Univ	414	19	6	53	5	–
*St Louis Univ	234	138	–	49	12	–
*Wash Univ (St L)	199	50	10	65	8	2
Montana	330	15	3	39	13	–
*Mont St Col	330	15	3	39	13	–
ELECTRICAL (Cont.)						
Nebraska	263	39	–	60	12	–
*Univ Nebr	263	39	–	60	12	–
Nevada	171	5	–	22	–	–
*Univ Nevada	171	5	–	22	–	–
New Hampshire	180	9	–	29	3	–
*Dartmouth Col 9/	10	–	–	3	–	–
*Univ N H	170	9	–	26	3	–
New Jersey	2909	380	44	307	80	3
*Fairleigh Dickinson	1203	–	–	70	–	–
*Newark Col Engr 5/	1418	207	10	162	35	–
*Princeton Univ	136	28	19	30	13	3
*Rutgers, The St Univ	152	51	11	45	9	–
Stevens Inst Tech	–	94	4	–	23	–
New Mexico	656	266	38	81	26	2
*N Mex St Univ	474	80	2	47	3	–
*Univ N Mex	182	186	36	34	23	2
New York	6705	2942	465	987	486	27
*City Col NY 5/	1889	314	–	225	25	–
*Clarkson Col Tech	341	4	–	62	2	–
*Columbia Univ 9/	84	142	63	24	65	3
*Cooper Union	86	–	–	17	–	–
*Cornell Univ	408	51	21	59	16	8
*Manhattan Col	523	–	–	108	–	–
*N Y Univ 5/	477	550	56	79	200	2
*Poly Inst Brooklyn 5/	1149	817	230	104	86	8
*Pratt Inst	273	6	–	18	–	–
*Rensselaer Poly Inst 3/	692	54	26	117	25	1
*Syracuse Univ	208	836	60	49	39	5
*Union Col & Univ	230	43	–	29	3	–
Univ Buffalo	262	81	–	31	16	–
Univ Roch	83	44	9	5	9	–
North Carolina	1194	93	19	184	13	1
NC Ag & Tech Col	173	–	–	16	–	–
*Duke Univ	139	31	7	45	7	–
*NC St Col Ag & Engr	882	62	12	123	6	1
North Dakota	346	18	–	64	6	–
*N Dak St Univ	235	13	–	34	4	–
*Univ N Dak	111	5	–	30	2	–
Ohio	3230	362	96	454	101	10
*A F Inst Tech	46	59	–	22	39	–
*Case Inst	278	80	23	56	16	5
*Fenn Col 6/ 10/	338	–	–	28	–	–
*Ohio Northern Univ	97	–	–	14	–	–
*Ohio St Univ	567	181	72	83	31	5
*Ohio Univ	108	9	–	65	6	–
*Univ Akron 6/	77	–	–	25	–	–
*Univ Cincinnati 6/	770	21	1	69	5	–
*Univ Dayton	383	–	–	40	–	–
*Univ Toledo	260	12	–	17	4	–
*Youngstown Univ 5/	306	–	–	35	–	–
Oklahoma	868	71	11	178	27	–
*Okla St Univ A & AS	463	46	11	104	21	–
*Univ Okla	405	25	–	74	6	–
Oregon	277	23	4	62	5	–
*Oregon St Univ	277	23	4	62	5	–
Pennsylvania	4966	1673	223	859	207	23
*Bucknell Univ	126	–	–	14	–	–
*Carnegie Inst Tech 5/	585	57	47	84	25	11
*Drexel Inst Tech 6/	1747	417	–	180	65	–
Gannon Col	196	–	–	28	–	–
Grove City Col	91	–	–	14	–	–
*Lafayette Col	144	–	–	38	–	–
*Lehigh Univ	193	30	6	60	6	–
Pa Military Col	79	–	–	11	–	–
*Pa St Univ	669	81	12	184	13	1
*Swarthmore Col	11	–	–	3	–	–
*Univ Pa	192	910	131	54	72	10
*Univ Pittsburgh 5/	520	100	27	121	26	1
*Villanova Univ	113	78	–	68	–	–
Rhode Island	149	19	9	61	6	1
*Brown Univ	24	4	8	8	5	1
*Univ R I	125	15	1	53	1	–
South Carolina	912	15	–	125	6	–
Citadel	163	–	–	21	–	–
*Clemson Agr Col	465	4	–	59	2	–

See footnotes at end of table.

Table D.--Engineering enrollments and degrees by level, curriculum, state and institution: 1961--Cont.

(— = zero)

ELECTRICAL, ENGINEERING MECHANICS, ENGINEERING PHYSICS

Institution	Enrollments Fall 1961			Degrees 1960-61		
	B.S.	M.S.	Ph.D.	B.S.	M.S.	Ph.D.
ELECTRICAL (Cont.)						
South Carolina (Cont.)						
*Univ S C	283	11	-	41	4	-
South Dakota	202	6	-	83	4	-
*S Dak Mines	120	4	-	30	-	-
*S Dak St Col A & MA	82	2	-	53	4	-
Tennessee	1506	65	3	189	12	-
Christian Bros Col.	266	-	-	30	-	-
Tenn A & I St Univ	118	-	-	3	-	-
Tenn Poly Inst	304	-	-	28	-	-
*Univ Tenn 3/	556	63	-	99	12	-
*Vanderbilt Univ	262	2	3	29	-	-
Texas	4042	358	48	471	110	4
Arlington St Col	857	-	-	14	-	-
*Lamar St Col Tech	284	-	-	33	-	-
Prairie View A & M	87	-	-	6	-	-
*Rice Univ	84	8	7	17	3	-
*Southern Meth Univ 6/	210	243	-	60	55	-
*Texas A & M	522	17	10	67	18	-
Texas Col A & I	122	2	-	11	-	-
*Texas Tech Col	538	12	-	77	6	-
Texas Western Col	321	-	-	22	-	-
*Univ Houston	347	16	-	38	-	-
*Univ Texas	670	60	31	126	28	4
Utah	938	72	5	125	12	5
*Brigham Young Univ	300	4	-	21	-	-
*Univ Utah	374	56	5	78	5	5
*Utah St Univ A & AS	264	12	-	26	7	-
Vermont	184	10	-	24	5	-
*Norwich Univ	74	-	-	7	-	-
*Univ Vermont	110	10	-	17	5	-
Virginia	1307	60	5	177	2	-
*Univ Va	264	43	5	47	2	-
*Va Mil Inst	130	-	-	17	-	-
*Va Poly Inst 3/	913	17	-	113	-	-
Washington	1180	193	35	227	35	3
Gonzaga Univ	96	-	-	16	-	-
Seattle Univ	172	77	-	16	7	-
*Univ Wash	535	106	35	157	25	3
Walla Walla Col	42	-	-	5	-	-
*Wash St Univ	335	10	-	33	3	-
West Virginia	393	5	-	65	6	-
W Va Inst Tech	101	-	-	17	-	-
*W Va Univ	292	5	-	48	6	-
Wisconsin	2623	180	37	359	23	10
*Marquette Univ 5/ 3/	602	68	-	85	3	-
Milwaukee Sch Engr	885	-	-	108	-	-
*Univ Wisc	1136	112	37	166	20	10
Wyoming	258	20	-	35	4	-
*Univ Wyo	258	20	-	35	4	-
Puerto Rico	104	-	-	47	-	-
*Univ P R	104	-	-	47	-	-
ENGINEERING MECHANICS (TOTAL)	537	773	426	65	222	42
Alabama	-	9	1	-	1	-
Univ Ala	-	9	1	-	1	-
Arkansas	-	3	-	-	3	-
Univ Ark	-	3	-	-	3	-
California	11	155	65	-	16	5
San Diego St Col	11	107	-	-	-	-
Stanford Univ	-	41	45	-	16	5
Univ Calif (Berkeley)	-	7	20	-	-	-
Florida	21	12	16	-	5	-
Univ Fla	21	12	16	-	5	-
Georgia	12	4	-	2	1	-
Ga Inst Tech	12	4	-	2	1	-
Illinois	54	54	69	19	18	11
Ill Inst Tech	-	25	19	-	2	1
Northwestern Univ	-	-	-	-	2	-
*Univ Ill	54	29	50	19	14	10
Iowa	-	22	27	-	21	3
Iowa St U Sci & Tech	-	2	10	-	3	3
St Univ Iowa	-	20	17	-	18	-

Institution	Enrollments Fall 1961			Degrees 1960-61		
	B.S.	M.S.	Ph.D.	B.S.	M.S.	Ph.D.
ENGINEERING MECHANICS (Cont.)						
Kansas	-	20	17	-	14	-
Kan St Univ A & AS	-	7	4	-	7	-
Univ Kansas	-	13	13	-	7	-
Louisiana	-	7	-	-	4	-
La St Univ & A & M Col	-	7	-	-	4	-
Maryland	73	8	33	6	8	3
Johns Hopkins Univ	73	8	33	6	8	3
Massachusetts	-	-	-	-	2	-
Northeastern Univ	-	-	-	-	2	-
Michigan	19	133	43	10	41	4
Mich Col M & T	-	5	-	-	5	-
Mich St Univ A & AS	-	7	-	-	8	2
*Univ Michigan	19	82	37	10	17	2
Wayne St Univ	-	39	6	-	11	-
Minnesota	-	19	9	-	-	-
Univ Minn	-	19	9	-	-	-
Missouri	-	83	4	-	5	1
St Louis Univ	-	72	-	-	4	-
Wash Univ (St L)	-	11	4	-	1	1
Nebraska	-	12	6	-	6	-
Univ Nebr	-	12	6	-	6	-
New Jersey	-	1	-	-	-	-
Rutgers, The St Univ	-	1	-	-	-	-
New York	7	59	20	3	34	3
*Columbia Univ 9/	7	14	3	3	11	1
Cornell Univ	-	11	17	-	2	2
N Y Univ	-	34	-	-	21	-
North Carolina	-	7	-	-	-	-
N C St Col Agr & Engr	-	7	-	-	-	-
Ohio	189	29	22	-	9	1
Case Inst	-	11	7	-	3	-
Ohio St Univ	-	18	15	-	3	-
Ohio Univ	189	-	-	-	-	-
Univ Cincinnati	-	-	-	-	3	1
Oklahoma	-	-	-	-	1	-
Univ Okla	-	-	-	-	1	-
Pennsylvania	90	64	45	12	14	5
*Lehigh Univ	28	6	5	9	2	-
Pa St Univ	62	35	21	3	5	4
Univ Pa	-	23	19	-	7	1
Texas	-	4	17	-	6	1
Univ Texas	-	4	17	-	6	1
Utah	-	-	-	-	1	-
Univ Utah	-	-	-	-	1	-
Virginia	46	45	12	13	8	3
*Va Poly Inst	46	32	12	13	8	3
Univ Va	-	13	-	-	-	-
West Virginia	1	4	1	-	1	-
W Va Univ	1	4	1	-	1	-
Wisconsin	14	19	19	-	3	2
Univ Wisc	14	19	19	-	3	2
ENGINEERING PHYSICS (TOTAL)	1762	97	100	381	6	1
Alabama	37	-	-	16	-	-
Auburn Univ	37	-	-	16	-	-
Arizona	54	-	-	1	-	-
Univ Ariz	54	-	-	1	-	-
California	52	-	-	23	-	-
Univ Calif (Berkeley)	52	-	-	23	-	-
Colorado	156	-	-	25	-	-
Univ Colo	156	-	-	25	-	-
Illinois	238	-	-	34	-	-
Univ Ill	238	-	-	34	-	-
Kansas	77	1	-	16	-	-
*Univ Kansas	77	1	-	16	-	-
Maine	90	-	-	28	-	-
*Univ Maine	90	-	-	28	-	-
Maryland	5	-	-	-	-	-
John Hopkins Univ	5	-	-	-	-	-
Massachusetts	10	25	80	-	-	-
*Harvard Univ 9/	-	25	79	-	-	-
Merrimack Col	9	-	-	-	-	-

See footnotes at end of table.

Table D.--Engineering enrollments and degrees by level, curriculum, state and institution: 1961--Cont.

(- = zero)

ENGINEERING PHYSICS, ENGINEERING SCIENCE, GENERAL ENGINEERING

Institution	Enrollments Fall 1961			Degrees 1960-61		
	B.S.	M.S.	Ph.D.	B.S.	M.S.	Ph.D.
ENGINEERING PHYSICS (Cont.)						
Massachusetts (Cont.)						
Radcliffe Col	1	-	1	-	-	-
Michigan	95	-	-	24	-	-
Mich Col M & T	-	-	-	12	-	-
*Univ Mich	88	-	-	12	-	-
Wayne St Univ	7	-	-	-	-	-
Missouri	25	1	-	12	-	-
Wash Univ (St L)	25	1	-	12	-	-
New York	221	24	19	39	3	1
*Cornell Univ	183	24	19	25	3	1
N Y Univ	38	-	-	14	-	-
North Carolina	35	-	-	15	-	-
N C Agr & Tech Col	31	-	-	3	-	-
N C St Col Ag & Engr	4	-	-	12	-	-
Ohio	172	15	-	27	-	-
Penn Col	-	-	-	11	-	-
Ohio St Univ	112	8	-	14	-	-
*Univ Toledo	60	7	-	2	-	-
Oklahoma	154	16	-	36	2	-
*Univ Okla	97	16	-	20	2	-
Univ Tulsa	57	-	-	16	-	-
Oregon	27	-	-	-	-	-
Oregon St Univ	27	-	-	-	-	-
Pennsylvania	47	-	-	20	-	-
Geneva Col	2	-	-	-	-	-
Lehigh Univ	45	-	-	20	-	-
Rhode Island	10	-	-	7	-	-
Univ R I	10	-	-	7	-	-
South Dakota	10	-	-	8	-	-
*S Dak St Col A & MA	10	-	-	8	-	-
Tennessee	182	13	-	40	-	-
Univ Chattanooga	71	-	-	22	-	-
Univ Tenn	111	13	-	18	-	-
Texas	65	-	-	6	-	-
Tex Tech Col	65	-	-	6	-	-
Virginia	-	2	1	-	1	-
Univ Va	-	2	1	-	1	-
Washington	-	-	-	4	-	-
Walla Walla Col	-	-	-	4	-	-
ENGINEERING SCIENCE (TOTAL)	1540	597	85	231	135	15
Arizona	70	31	-	2	3	-
*Ariz St Univ	70	31	-	2	3	-
California	39	15	18	16	34	10
Calif Inst Tech	-	5	18	-	3	2
Harvey Mudd Col	26	-	-	12	-	-
Stanford Univ	3	10	-	3	11	-
Univ Calif (Berkeley)	10	-	-	1	20	8
District of Columbia	-	201	6	-	8	-
Geo Wash Univ	-	201	6	-	8	-
Florida	96	3	-	8	-	-
Fla St Univ	74	3	-	4	-	-
Univ Fla	9	-	-	-	-	-
Univ Miami	13	-	-	4	-	-
Illinois	151	4	2	19	-	-
Ill Inst Tech	39	-	-	-	-	-
*Northwestern Univ 3/	112	4	2	19	-	-
Indiana	185	38	22	45	36	4
*Purdue Univ	134	34	22	33	28	1
Univ Notre Dame	51	4	-	12	8	3
Iowa	5	-	-	-	-	-
Iowa St U Sci & Tech	5	-	-	-	-	-
Michigan	235	38	-	28	-	-
Mich St Univ A & AS	125	-	-	-	-	-
Univ Detroit	-	38	-	-	-	-
*Univ Mich	110	-	-	28	-	-
Missouri	81	25	6	8	-	-
Wash Univ (St L)	81	25	6	8	-	-
Nevada	25	-	-	1	-	-
Univ Nevada	25	-	-	1	-	-
New Hampshire	70	8	-	39	2	-
Dartmouth Col	70	8	-	39	2	-
New York	163	196	26	11	46	-
N Y Univ	10	2	-	3	-	-
ENGINEERING SCIENCE (Cont.)						
New York (Cont.)						
Pratt Inst	36	9	-	8	2	-
Rensselaer Poly Inst	18	185	26	-	44	-
St Univ N Y (Long Island Ctr)	99	-	-	-	-	-
Ohio	253	35	-	26	3	-
Case Inst	115	-	-	20	-	-
Penn Col	50	-	-	6	-	-
Univ Cincinnati	88	-	-	-	-	-
Univ Dayton	-	35	-	-	-	-
Univ Toledo	-	-	-	-	3	-
Oklahoma	-	3	5	-	2	1
Univ Okla	-	3	5	-	2	1
Oregon	6	-	-	6	-	-
Univ Portland	6	-	-	6	-	-
Pennsylvania	68	-	-	21	-	-
*Pa St Univ	64	-	-	19	-	-
Swarthmore Col	4	-	-	2	-	-
Tennessee	21	-	-	1	1	-
Tenn Poly Inst	21	-	-	1	-	-
Univ Tenn	-	-	-	-	1	-
Texas	72	-	-	-	-	-
Univ Texas	72	-	-	-	-	-
GENERAL ENGINEERING (TOTAL)	5499	892	277	923	143	8
California	1651	784	275	542	129	8
Calif Inst Tech	207	-	-	48	-	-
Fresno St Col	27	-	-	1	-	-
L A St Col AA & S	-	-	-	139	-	-
San Diego St Col	74	-	-	68	3	-
San Jose St Col	8	-	-	3	-	-
Stanford Univ	240	-	-	13	-	-
*Univ Calif (Los Angeles) 14/	1057	784	275	267	126	8
Univ Redlands	38	-	-	3	-	-
Connecticut	186	-	-	2	-	-
New Haven Col	134	-	-	-	-	-
Trinity Col	52	-	-	2	-	-
District of Columbia	93	-	-	9	-	-
Geo Wash Univ	93	-	-	9	-	-
Hawaii	333	-	-	16	-	-
Univ Hawaii	333	-	-	16	-	-
Illinois	463	-	-	49	-	-
North Central Col	52	-	-	10	-	-
*Univ Ill	411	-	-	39	-	-
Louisiana	47	-	-	7	-	-
La St Univ & A & M Col	2	-	-	-	-	-
McNeese St Col	45	-	-	7	-	-
Massachusetts	-	-	-	40	-	-
Harvard Univ	-	-	-	28	-	-
Lowell Tech Inst	-	-	-	12	-	-
Michigan	-	-	-	6	1	-
Univ Mich	-	-	-	6	1	-
Missouri	101	-	1	3	-	-
Univ Kans City	101	-	-	3	-	-
Wash Univ (St L)	-	-	1	-	-	-
New Jersey	927	-	-	77	-	-
Princeton Univ	65	-	-	5	-	-
*Stevens Inst Tech 14/	862	-	-	72	-	-
New Mexico	31	-	-	2	-	-
Eastern N Mex Univ	31	-	-	2	-	-
New York	346	-	-	29	-	-
*Cooper Union 10/	346	-	-	29	-	-
North Carolina	-	-	-	8	1	-
N C St Col Agr & Engr	-	-	-	8	1	-
Ohio	55	102	-	11	7	-
*Antioch Col 6/	54	-	-	11	-	-
Ohio Northern Univ	1	-	-	-	-	-
Univ Akron	-	102	-	-	7	-

See footnotes at end of table.

Table D.—Engineering enrollments and degrees by level, curriculum, state and institution: 1961--Cont.

(– = zero)

GENERAL ENGINEERING, GEOLOGICAL, GEOPHYSICAL, INDUSTRIAL

Institution	Enrollments Fall 1961			Degrees 1960-61		
	B.S.	M.S.	Ph.D.	B.S.	M.S.	Ph.D.
GENERAL ENGINEERING (Cont.)						
Oklahoma	62	6	1	8	5	–
*Okla St Univ A & AS	20	2	1	1	1	–
Univ Okla	42	4	–	7	4	–
Oregon	154	–	–	15	–	–
Univ Portland	154	–	–	15	–	–
Pennsylvania	489	–	–	18	–	–
Geneva Col	141	–	–	15	–	–
Pa Mil Col	348	–	–	–	–	–
Univ Pittsburgh	–	–	–	3	–	–
Tennessee	35	–	–	–	–	–
Tenn Poly Inst	35	–	–	–	–	–
Texas	124	–	–	23	–	–
Texas Col A & I	124	–	–	23	–	–
Utah	36	–	–	2	–	–
Westminster Col	36	–	–	2	–	–
West Virginia	266	–	–	35	–	–
Davis-Elkins Col	–	–	–	6	–	–
Marshall Univ	266	–	–	29	–	–
Wyoming	100	–	–	21	–	–
Univ Wyo	100	–	–	21	–	–
GEOLOGICAL (TOTAL)	424	44	5	162	16	3
Alaska	4	–	–	–	–	–
*Univ Alaska	4	–	–	–	–	–
Arizona	25	–	–	14	–	–
*Univ Ariz	25	–	–	14	–	–
California	7	–	–	2	–	–
*Univ Calif (Berkeley) 3/	7	–	–	2	–	–
Colorado	104	21	4	28	4	3
*Colo Mines	104	21	4	28	4	3
Idaho	14	–	–	8	–	–
*Univ Idaho	14	–	–	8	–	–
Kansas	7	–	–	13	–	–
*Univ Kansas	7	–	–	13	–	–
Louisiana	2	–	–	–	–	–
*La Poly Inst	2	–	–	–	–	–
Michigan	67	1	–	18	1	–
*Mich Col M & T	67	1	–	18	1	–
Minnesota	18	1	–	5	–	–
*Univ Minn	18	1	–	5	–	–
Mississippi	9	–	–	2	–	–
*Univ Miss	9	–	–	2	–	–
Missouri	26	1	–	6	–	–
*St Louis Univ	10	–	–	1	–	–
Missouri Mines	3	–	–	–	–	–
*Wash Univ (St L)	13	1	–	5	–	–
Montana	14	–	–	9	–	–
Mont Mines	14	–	–	9	–	–
Nevada	13	1	–	2	–	–
*Univ Nevada	13	1	–	2	–	–
New Jersey	13	2	–	4	1	–
*Princeton Univ	13	2	–	4	1	–
New York	1	–	–	–	–	–
Columbia Univ	1	–	–	–	–	–
North Carolina	32	3	–	–	–	–
N C St Col Agr & Engr	31	3	–	–	–	–
North Dakota	3	–	–	3	–	–
Univ N Dak	3	–	–	3	–	–
Oklahoma	21	4	–	25	5	–
*Univ Okla	21	4	–	25	5	–
Pennsylvania	–	–	–	2	1	–
Univ Pittsburgh	–	–	–	2	1	–
South Dakota	20	4	–	13	1	–
*S Dak Mines	20	4	–	13	1	–
Texas	11	–	–	4	–	–
*Texas A & M	11	–	–	4	–	–
Utah	14	6	1	4	3	–
*Univ Utah	14	6	1	4	3	–
GEOPHYSICAL (TOTAL)	166	40	14	28	6	4
Arizona	4	–	–	–	–	–
Univ Ariz	4	–	–	–	–	–
Colorado	125	16	2	16	4	3
*Colo Mines	125	16	2	16	4	3
Michigan	22	–	–	4	1	–
Mich Col M & T	22	–	–	4	1	–
Minnesota	–	–	–	2	–	–
Univ Minn	–	–	–	2	–	–
Missouri	6	6	12	6	1	1
*St Louis Univ	6	6	12	6	1	1
Utah	9	18	–	–	–	–
Univ Utah	9	18	–	–	–	–
INDUSTRIAL (TOTAL)	9349	2682	212	2084	458	19
Alabama	108	3	–	29	4	–
*Univ Ala	108	3	–	29	4	–
Alaska	–	2	–	–	1	–
Univ Alas	–	2	–	–	1	–
Arizona	46	8	3	8	1	–
*Ariz St Univ	46	8	3	8	1	–
Arkansas	87	5	–	29	1	–
*Univ Ark	87	5	–	29	1	–
California	407	144	30	113	44	3
Calif St Poly	(181)	(–)	(–)	(23)	(–)	(–)
Kellogg-V Campus	76	–	–	7	–	–
San Luis Ob Campus	105	–	–	16	–	–
Fresno St Col	13	–	–	6	–	–
San Jose St Col	40	–	–	9	–	–
*Stanford Univ	76	50	15	36	25	3
*Univ Calif (Berkeley) 3/	42	26	11	17	4	–
Univ of Pacific	4	–	–	3	–	–
*Univ Sou Calif	51	68	4	19	15	–
Connecticut	357	30	–	82	16	–
New Haven Col	195	–	–	3	–	–
Univ Bridgeport	46	–	–	8	–	–
Univ Conn	17	–	–	13	–	–
Yale Univ	99	30	–	58	16	–
District of Columbia	–	294	–	–	31	–
Geo Wash Univ	–	294	–	–	31	–
Florida	244	2	–	56	2	–
*Univ Fla 3/	138	2	–	46	2	–
Univ Miami	106	–	–	10	–	–
Georgia	436	40	8	132	9	1
*Ga Inst Tech 3/	436	40	8	132	9	1
Illinois	616	66	21	105	14	2
*Bradley Univ	48	4	–	15	2	–
*Ill Inst Tech 3/	207	36	8	30	4	–
Millikin Univ	121	–	–	8	–	–
*Northwestern Univ 3/	78	26	13	16	8	2
*Univ Ill	162	–	–	36	–	–
Indiana	169	28	6	42	17	2
Evansville Col	36	–	–	7	–	–
*Purdue Univ	133	28	6	35	17	2
Iowa	212	44	6	48	5	1
*Iowa St U Sci & Tech	212	2	3	48	–	1
*St Univ Iowa 2/	–	42	3	–	5	–
Kansas	131	12	–	39	1	–
*Kans St Univ A & AS	47	12	–	25	1	–
*Univ Kansas 2/	17	–	–	–	–	–
Univ Wichita	67	–	–	14	–	–
Louisiana	31	–	–	9	–	–
La Poly Inst	31	–	–	9	–	–
Maryland	122	52	19	31	4	3
*Johns Hopkins Univ	122	52	19	31	4	3
Massachusetts	672	116	–	130	4	–
Boston Univ	266	–	–	47	–	–
Bradford Durfee	20	–	–	6	–	–
*Northeastern Univ 6/	139	116	–	45	4	–
*Univ Mass 2/	35	–	–	14	–	–
Western New Eng Col	212	–	–	18	–	–
Michigan	1208	113	21	196	16	1
Detroit Inst Tech	2	–	–	2	–	–
Gen Motors Inst	758	–	–	109	–	–
Lawrence Inst	68	–	–	9	–	–
Mich Col M & T	14	–	–	15	–	–
*Univ Mich	244	92	21	48	13	1
*Wayne St Univ 5/	57	21	–	7	3	–

See footnotes at end of table.

Table D.—Engineering enrollments and degrees by level, curriculum, state and institution: 1961—Cont.

(— = zero)

INDUSTRIAL, MECHANICAL

Institution	Enrollments Fall 1961			Degrees 1960-61		
	B.S.	M.S.	Ph.D.	B.S.	M.S.	Ph.D.
INDUSTRIAL (Cont.)						
Michigan (Cont.)						
Western Mich Univ ...	65	-	-	6	-	-
Minnesota	-	17	3	-	7	-
Univ Minn	-	17	3	-	7	-
Mississippi	75	-	-	16	-	-
Miss St Univ	75	-	-	16	-	-
Missouri	191	102	6	64	32	1
St Louis Univ	55	-	-	23	-	-
Mo Univ	80	15	-	17	6	-
*Wash Univ (St L)	56	87	6	24	26	1
Montana	24	3	-	5	4	-
*Mont St Col	24	3	-	5	4	-
Nebraska	261	-	-	67	-	-
Mun Univ Omaha	261	-	-	67	-	-
New Hampshire	6	-	-	5	-	-
Dartmouth Col	6	-	-	5	-	-
New Jersey	469	499	-	44	96	-
Fairleigh Dickinson U	197	-	-	26	-	-
Newark Col Engr	229	172	-	-	27	-
*Rutgers, The St Univ	43	-	-	18	-	-
Stevens Inst Tech ...	-	327	-	-	69	-
New York	409	558	68	138	73	4
Clarkson Col Tech ...	-	17	-	-	-	-
*Columbia Univ 9/	29	84	37	7	28	3
Cornell Univ	-	9	10	-	4	1
N Y Univ 5/	109	106	17	43	33	-
Poly Inst Brooklyn ..	-	47	-	-	-	-
Pratt Inst	30	-	-	4	-	-
*Rensselaer Poly Inst 16/	149	133	4	55	5	-
*Syracuse Univ	38	157	-	11	3	-
Univ Buffalo	54	5	-	18	-	-
North Carolina	251	11	-	51	2	-
*N C St Col Agr & Engr	251	11	-	51	2	-
North Dakota	133	1	-	32	1	-
N Dak St Univ	82	1	-	15	1	-
Univ N Dak	51	-	-	17	-	-
Ohio	309	63	12	72	17	1
*Ohio St Univ	129	41	12	43	14	1
Univ Dayton	69	-	-	10	-	-
*Univ Toledo 2/	46	22	-	-	3	-
Youngstown Univ	65	-	-	19	-	-
Oklahoma	271	44	9	70	19	-
Okla City Univ	40	-	-	7	-	-
*Okla St Univ A & AS .	165	42	9	37	19	-
Univ Okla	66	2	-	26	-	-
Oregon	30	1	-	11	2	-
*Oregon St Univ	30	1	-	11	2	-
Pennsylvania	692	234	-	147	6	-
Drexel Inst Tech	161	181	-	-	-	-
Geneva Col	92	-	-	27	-	-
*Lafayette Col	53	-	-	14	-	-
*Lehigh Univ	134	16	-	31	5	-
*Pa St Univ	162	19	-	55	1	-
*Univ Pittsburgh 5/ ..	90	18	-	20	-	-
Rhode Island	31	-	-	19	-	-
*Univ R I 2/	31	-	-	19	-	-
South Carolina	72	-	-	12	-	-
Clemson	72	-	-	12	-	-
South Dakota	-	-	-	4	-	-
S Dak St Col A & MA .	-	-	-	4	-	-
Tennessee	258	18	-	55	4	-
Tenn Poly Inst	46	-	-	5	-	-
Univ Chattanooga	92	-	-	14	-	-
*Univ Tenn 3/	120	18	-	36	4	-
Texas	611	118	-	119	24	-
Arlington St Col	57	-	-	-	-	-
*Lamar St Col Tech ...	79	-	-	9	-	-
Le Tourneau Tech Inst	82	-	-	9	-	-
Southern Meth Univ 6/	42	84	-	17	16	-
*Texas A & M	105	7	-	25	3	-
*Texas Tech Col	157	8	-	37	-	-
*Univ Houston	89	19	-	14	3	-
Univ Texas	-	-	-	-	2	-
Utah	-	42	-	-	-	-
Univ Utah	-	42	-	-	-	-
Vermont	78	-	-	22	-	-
Norwich Univ	62	-	-	18	-	-
INDUSTRIAL (Cont.)						
Vermont (Cont.)						
Univ Vermont	16	-	-	4	-	-
Virginia	145	9	-	33	1	-
*Va Poly Inst	145	9	-	33	1	-
Washington	17	-	-	16	-	-
Univ Wash	17	-	-	16	-	-
West Virginia	88	3	-	18	-	-
*W Va Univ	88	3	-	18	-	-
Puerto Rico	82	-	-	23	-	-
Univ P R	82	-	-	23	-	-
MECHANICAL (TOTAL)	4643	6052	1050	8651	1401	106
Alabama	771	30	-	164	9	-
*Auburn Univ	221	16	-	112	6	-
Tuskegee Inst	61	2	-	-	-	-
*Univ Ala	489	12	-	52	3	-
Alaska	6	-	-	-	-	-
Univ Alaska	6	-	-	-	-	-
Arizona	495	72	10	85	12	-
*Ariz St Univ	272	48	2	22	4	-
*Univ Ariz 7/	223	24	8	63	8	-
Arkansas	222	6	-	47	1	-
John Brown Univ ..	28	-	-	4	-	-
*Univ Ark	194	6	-	43	1	-
California	2464	603	91	482	176	14
*Calif Inst Tech ..	-	46	11	-	30	7
Calif St Poly	(620)	(-)	(-)	(141)	(-)	(-)
Kellogg-V Campus .	262	-	-	29	-	-
San Luis Ob Campus	358	-	-	112	-	-
Chico St Col	41	-	-	4	-	-
Fresno St Col	67	-	-	15	-	-
Heald Engr Col ...	165	-	-	25	-	-
Long Beach St Col	98	-	-	25	-	-
L A St Col AA & S	237	-	-	-	-	-
Loyola Univ	54	-	-	8	-	-
Sacramento St Col	78	-	-	-	-	-
San Diego St Col	154	3	-	-	-	-
San Jose St Col	107	-	-	20	-	-
Stanford Univ	158	85	46	46	48	2
*U S Nav PG Sch ...	28	29	-	22	11	-
*Univ Calif (Berkeley) 3/ ...	316	65	15	121	36	4
*Univ Santa Clara .	85	104	-	12	-	-
*Univ Sou Calif ...	256	271	19	43	51	1
Colorado	566	94	3	114	12	-
*Colo St Univ	116	1	-	34	1	-
*Univ Colo	367	65	3	68	10	-
*Univ Denver	83	28	-	12	1	-
Connecticut	952	170	29	117	31	1
Hillyer Col	664	-	-	41	-	-
*Trinity Col	2	-	-	2	-	-
Univ Bridgeport ..	152	-	-	20	-	-
*Univ Conn	65	144	16	33	19	-
*Yale Univ	69	26	13	21	12	1
Delaware	136	34	-	29	15	-
*Univ Del	136	34	-	29	15	-
District of Columbia	388	21	13	59	1	-
*Catholic Univ	111	21	13	22	1	-
*Geo Wash Univ	106	-	-	18	-	-
*Howard Univ	171	-	-	19	-	-
Florida	401	88	-	100	4	-
*Univ Fla 3/	324	88	-	75	4	-
Univ Miami	107	-	-	25	-	-
Georgia	637	37	11	111	6	-
*Ga Inst Tech 3/ ..	637	37	11	111	6	-
Hawaii	73	-	-	-	6	-
Univ Hawaii	73	-	-	-	6	-
Idaho	177	6	-	32	-	-
*Univ Idaho	177	6	-	32	-	-
Illinois	2076	316	105	310	84	13
*Bradley Univ	241	50	-	58	4	-
*Ill Inst Tech 3/ .	935	134	28	81	15	1
*Northwestern Univ 3/.....	148	63	27	23	13	5
*Univ Ill	752	69	50	148	52	7
Indiana	1984	155	74	289	45	12
Evansville Col ...	80	-	-	12	-	-

See footnotes at end of table.

Table D.—Engineering enrollments and degrees by level, curriculum, state and institution: 1961--Cont.

(— = zero)

MECHANICAL

Institution	Enrollments Fall 1961			Degrees 1960-61		
	B.S.	M.S.	Ph.D.	B.S.	M.S.	Ph.D.
MECHANICAL (Cont.)						
Indiana (Cont.)						
Ind Tech Col	303	-	-	-	-	-
*Purdue Univ	676	105	70	170	39	12
*Rose Poly Inst	85	2	-	22	-	-
Tri State Col	434	-	-	-	-	-
*Univ Notre Dame	318	48	4	66	6	-
*Valparaiso Univ	88	-	-	20	-	-
Iowa	680	66	14	142	6	-
*Iowa St U Sci & Tech	463	25	8	84	2	-
*St Univ Iowa	217	41	6	58	4	-
Kansas	595	100	15	154	24	-
*Kan St Univ A & AS	265	20	15	76	14	-
*Univ Kansas	146	25	-	52	8	-
*Univ Wichita	184	55	-	26	2	-
Kentucky	409	41	-	80	6	-
*Univ Ky	316	25	-	53	3	-
*Univ Louisville 3/	93	16	-	27	3	-
Louisiana	686	51	4	161	10	-
*La Poly Inst	192	12	-	22	3	-
*La St Univ & A & M Col	242	18	-	81	2	-
Scu Univ & A&M Col	31	-	-	1	-	-
*Tulane Univ	47	21	4	25	5	-
*Univ S W La	174	-	-	32	-	-
Maine	189	5	-	70	1	-
*Univ Maine	189	5	-	70	1	-
Maryland	586	51	17	78	7	2
*Johns Hopkins Univ	279	-	-	29	-	-
*Univ Md	307	51	17	49	7	2
Massachusetts	1988	334	56	385	113	15
Bradford-Durfee	33	-	-	10	-	-
*Harvard Univ 9/	2	6	18	-	6	4
Lowell Tech Inst	98	-	-	18	-	-
*Mass Inst Tech 3/	192	142	38	83	82	11
New Bedford Inst Tech	64	-	-	9	-	-
*Northeastern Univ 6/	472	146	-	90	15	-
*Tufts Univ	96	-	-	44	-	-
*Univ Mass	132	8	-	30	2	-
Western New Eng Col	702	-	-	40	-	-
*Worcester Poly Inst	197	32	-	55	8	-
Michigan	4237	216	58	805	72	8
Detroit Inst Tech	196	-	-	32	-	-
Gen Motors Inst	1211	-	-	302	-	-
Lawrence Inst	597	-	-	49	-	-
*Mich Col M & T	538	4	-	115	-	-
*Mich St Univ A & AS	27	44	12	60	15	1
*Univ Detroit 6/	600	-	-	77	-	-
*Univ Mich	432	89	46	128	41	7
*Wayne St Univ 5/	387	79	-	42	16	-
Minnesota	491	68	40	119	15	4
*Univ Minn	491	68	40	119	15	4
Mississippi	285	12	-	70	1	-
*Miss St Univ 3/	233	12	-	59	-	-
*Univ Miss	52	-	-	11	1	-
Missouri	1096	70	9	207	24	-
*Mo Mines	652	27	-	131	8	-
*Mo Univ	339	16	-	54	9	-
*Wash Univ (St L)	105	27	9	22	7	-
Montana	165	6	-	22	-	-
*Mont St Col	165	6	-	22	-	-
Nebraska	220	6	-	59	2	-
*Univ Nebr	220	6	-	59	2	-
Nevada	86	2	-	15	-	-
*Univ Nevada	80	2	-	15	-	-
New Hampshire	127	2	-	43	1	-
*Dartmouth Col 9/	7	-	-	6	-	-
*Univ N H	120	2	-	37	1	-
New Jersey	1518	341	45	304	92	4
Fairleigh-Dickinson U	704	-	-	54	-	-
*Newark Col Engr 5/ 16/	692	123	-	141	27	-
*Princeton Univ	40	11	22	10	13	2
*Rutgers, The St Univ	82	7	-	30	1	-
Stevens Inst Tech	-	200	23	69	51	2
New Mexico	449	178	25	86	37	-
*N Mex St Univ	325	53	3	55	22	-
Univ N Mex	124	125	22	31	15	-
New York	3167	1063	147	673	234	9
*City Col N Y 5/	669	204	-	141	32	-
*Clarkson Col Tech	260	6	-	60	4	-
*Columbia Univ 9/	23	88	31	10	40	3
*Cooper Union	99	-	-	15	-	-
*Cornell Univ	386	27	18	88	21	3
Manhattan Col	150	-	-	26	-	-
*N Y Univ 5/	182	74	18	61	29	3
*Poly Inst Brooklyn 5/	474	141	21	83	9	-
*Pratt Inst	118	5	-	9	1	-
Rensselaer Poly Inst 3/	316	281	47	81	73	-
*Syracuse Univ	114	139	5	12	6	-
*Union Col & Univ	110	37	-	10	5	-
Univ Buffalo	168	31	4	41	11	-
*Univ Rochester	98	30	3	24	3	-
North Carolina	876	39	17	159	9	-
*Duke Univ	102	8	-	32	4	-
N C Ag & Tech Col	89	-	-	9	-	-
*N C St Col Ag & Engr	685	31	17	118	5	-
North Dakota	303	13	-	78	7	-
*N Dak St Univ	222	9	-	46	5	-
*Univ N Dak	81	4	-	32	2	-
Ohio	3158	282	48	398	34	2
*Case Inst	209	124	14	43	12	-
*Penn Col 6/ 10/	309	-	-	41	-	-
*Ohio Northern Univ	54	-	-	16	-	-
*Ohio St Univ	298	56	34	59	17	2
*Ohio Univ	196	6	-	56	-	-
*Univ Akron 6/	58	-	-	18	-	-
*Univ Cincinnati 6/	1112	53	-	63	5	-
*Univ Dayton	275	-	-	28	-	-
*Univ Toledo	399	43	-	38	-	-
*Youngstown Univ 5/	248	-	-	36	-	-
Oklahoma	716	87	16	197	32	-
*Okla St Univ A & AS	411	61	16	110	29	-
*Univ Okla	188	26	-	79	3	-
Univ Tulsa	117	-	-	8	-	-
Oregon	216	19	5	75	2	-
*Oregon St Univ	216	19	5	75	2	-
Pennsylvania	3524	569	105	722	109	14
*Bucknell Univ	129	9	-	28	1	-
*Carnegie Inst Tech 5/	499	79	14	79	20	3
*Drexel Inst Tech 6/	1275	151	-	190	30	-
Gannon Col	105	-	-	4	-	-
Geneva Col	-	-	-	1	-	-
Grove City Col	80	-	-	13	-	-
*Lafayette Col	95	-	-	36	-	-
*Lehigh Univ	146	42	15	65	11	1
Pa Mil Col	69	-	-	30	-	-
*Pa St Univ	327	18	12	100	5	1
*Swarthmore Col	6	-	-	3	-	-
*Univ Pa	93	110	18	16	18	1
*Univ Pittsburgh 5/	388	70	46	104	24	8
*Villanova Univ	312	90	-	53	-	-
Rhode Island	119	7	-	20	4	-
*Brown Univ	9	-	-	7	-	-
*Univ R I	110	7	-	19	4	-
South Carolina	566	10	-	83	3	-
*Clemson Agr Col	366	6	-	45	3	-
S C St Col	-	-	-	2	-	-
*Univ S C	200	4	-	30	-	-
South Dakota	191	5	-	83	1	-
*S Dak Mines	131	2	-	39	-	-
*S Dak St Col A & MA	60	3	-	44	1	-
Tennessee	930	59	-	157	5	-
Christian Bros	131	-	-	22	-	-
Tenn A & I	54	-	-	6	-	-
Tenn Poly Inst	269	-	-	24	-	-
*Univ Tenn 3/	350	59	-	69	5	-

See footnotes at end of table.

Table D.--Engineering enrollments and degrees by level, curriculum, state and institution: 1961--Cont.

(– = zero)

MECHANICAL, METALLURGICAL, MINING

Institution	Enrollments Fall 1961			Degrees 1960-61		
	B.S.	M.S.	Ph.D.	B.S.	M.S.	Ph.D.
MECHANICAL (Cont.)						
Tennessee (Cont.)						
*Vanderbilt Univ	126	-	-	36	-	-
Texas	2702	171	38	390	75	1
Arlington St Col	445	-	-	10	-	-
*Lamar St Col Tech ...	217	-	-	26	-	-
Prairie View A & M ..	51	-	-	7	-	-
*Rice Univ	43	25	7	14	10	-
*Southern Meth Univ 6/	120	73	-	40	20	-
*Texas Tech Col	303	10	-	56	6	-
*Texas A & M	455	18	9	103	14	-
Texas Western Col ...	123	-	-	-	-	-
*Univ Houston	389	28	-	32	9	-
*Univ Texas	496	17	22	102	16	1
Utah	547	79	8	77	5	-
*Brigham Young Univ ..	176	5	-	14	-	-
*Univ Utah	254	67	8	54	4	-
*Utah St Univ A & AS .	117	7	-	9	1	-
Vermont	143	6	-	24	-	-
*Norwich Univ	68	-	-	8	-	-
*Univ Vermont	75	6	-	16	-	-
Virginia	959	55	-	155	9	-
*Univ Va	142	40	-	29	2	-
*Va Poly Inst 3/	817	15	-	126	7	-
Washington	768	208	15	197	26	-
Gonzaga Univ	61	-	-	13	-	-
Seattle Univ	134	54	-	18	1	-
*Univ Wash	353	147	15	130	23	-
Walla Walla Col	20	-	-	3	-	-
*Wash St Univ	200	7	-	33	2	-
West Virginia	219	11	1	50	3	-
W Va Inst Tech	59	-	-	17	-	-
*W Va Univ	160	11	1	33	3	-
Wisconsin	1807	177	31	297	30	7
*Marquette Univ 5/ 3/	403	26	-	68	-	-
Milwaukee Sch Engr ..	546	-	-	61	-	-
*Univ Wis	858	151	31	168	30	7
Wyoming	205	11	-	38	-	-
*Univ Wyo	205	11	-	38	-	-
Puerto Rico	130	-	-	33	-	-
*Univ P R	130	-	-	33	-	-
METALLURGICAL (TOTAL)	3026	784	423	720	218	78
Alabama	57	2	-	10	2	-
*Univ Ala	57	2	-	10	2	-
Alaska	3	-	-	1	-	-
*Univ Alaska	3	-	-	1	-	-
Arizona	45	14	8	7	-	-
*Univ Ariz	45	14	8	7	-	-
California	86	48	53	28	10	3
Calif St Poly (San Luis Ob Campus)	40	-	-	-	-	-
San Jose St Col	16	-	-	10	-	-
*Stanford Univ	20	26	19	8	4	1
*Univ Calif (Berkeley) 3/.....	10	22	34	10	6	2
Colorado	221	2	4	48	2	2
*Colo Mines	221	2	4	48	2	2
Connecticut	8	15	8	2	3	4
Yale Univ	8	15	8	2	3	4
Delaware	-	1	-	-	-	-
Univ Delaware	-	1	-	-	-	-
Idaho	22	2	-	3	4	-
*Univ Idaho	22	2	-	3	4	-
Illinois	236	58	54	41	27	10
*Ill Inst Tech 3/	139	19	11	20	3	3
Northwestern Univ	-	15	18	-	10	3
*Univ Ill	97	24	25	21	14	4
Indiana	115	19	9	28	12	6
Ind Tech Col	6	-	-	-	-	-
*Purdue Univ	72	13	5	20	4	2
*Univ Notre Dame	37	6	4	8	8	4
Kansas	15	2	-	3	2	-
Univ Kansas	15	2	-	3	2	-
Kentucky	34	8	-	6	-	-
*Univ Ky	34	8	-	6	-	-
Maryland	-	-	-	6	-	2
Univ Maryland	-	-	-	6	-	2
METALLURGICAL (Cont.)						
Massachusetts	61	60	88	28	45	18
Harvard Univ	-	1	6	-	10	3
*Mass Inst Tech	61	59	82	28	35	15
Michigan	343	49	21	77	22	11
*Mich Col M & T	190	5	-	30	1	-
*Mich St Univ A & AS	37	5	2	14	-	-
*Univ Mich	62	12	16	20	17	11
*Wayne St Univ 5/ ..	54	27	3	13	4	-
Minnesota	29	8	1	2	2	-
*Univ Minn	29	8	1	2	2	-
Missouri	198	28	4	63	9	-
*Mo Mines 17/	189	24	3	59	8	-
Wash Univ (St L) ..	9	4	1	4	1	-
Montana	30	1	-	2	-	-
*Mont Mines 18/	30	1	-	2	-	-
Nevada	14	1	-	3	-	-
*Univ Nev	14	1	-	3	-	-
New Mexico	6	-	-	3	-	-
N Mex Inst M & T ..	6	-	-	3	-	-
New York	246	152	73	63	20	7
*Columbia Univ 9/ ..	34	10	14	3	2	2
*Cornell Univ	37	13	4	3	-	-
*N Y Univ	28	31	16	6	1	1
*Poly Inst Brooklyn 5/	93	33	-	24	3	-
Rensselaer Poly ...	84	53	32	27	13	4
Syracuse Univ	-	12	5	-	1	-
North Carolina	38	9	-	16	2	-
N C St Col Ag&Engr	38	9	-	16	2	-
Ohio	267	60	30	68	15	2
*Case Inst	-	-	-	23	-	-
Penn Col	62	-	-	6	-	-
*Ohio St Univ	45	52	25	12	13	2
*Univ Cinn 6/	101	8	5	15	2	-
Youngstown Univ ...	59	-	-	12	-	-
Oklahoma	22	7	-	6	1	-
*Univ Okla	22	7	-	6	1	-
Pennsylvania	686	165	66	118	18	11
*Carnegie Inst 5/ ..	226	65	29	23	10	4
*Drexel Inst 6/	94	-	-	13	-	-
Grove City Col	41	-	-	5	-	-
*Lafayette Col	58	-	-	13	-	-
*Lehigh Univ	88	19	13	23	4	3
*Univ Pa	19	35	15	4	3	3
*Univ Pittsburgh 5/	160	46	9	37	1	1
South Dakota	26	1	-	6	-	-
*S Dak Mines	26	1	-	6	-	-
Tennessee	28	35	-	5	3	-
Univ Tenn	28	35	-	5	3	-
Texas	35	-	-	7	-	-
*Texas Western Col	35	-	-	7	-	-
Utah	24	1	1	9	-	-
*Univ Utah	24	1	1	9	-	-
Virginia	52	15	-	12	3	-
*Va Poly Inst	52	15	-	12	3	-
Washington	63	20	1	25	3	-
*Univ Wash	26	17	1	13	3	-
*Wash St Univ 19/ ..	37	3	-	12	-	-
Wisconsin	16	1	2	24	13	2
*Univ Wisc	16	1	2	24	13	2
MINING (TOTAL)	789	140	46	220	33	2
Alabama	41	-	-	3	-	-
*Univ Ala	41	-	-	3	-	-
Alaska	12	-	-	3	-	-
*Univ Alaska	12	-	-	3	-	-
Arizona	48	7	-	6	2	-
*Univ Ariz	48	7	-	6	2	-
California	4	22	11	2	4	-
Stanford Univ	-	-	-	-	2	-
*Univ Calif (Berkeley) 3/	4	22	11	2	2	-
Colorado	181	14	1	35	2	-
*Colo Mines	181	14	1	35	2	-
Idaho	13	2	-	6	1	-
*Univ Idaho	13	2	-	6	1	-

See footnotes at end of table.

Table D.--Engineering enrollments and degrees by level, curriculum, state and institution: 1961--Cont.

(– = zero)

MINING, NAVAL ARCHITECTURE AND MARINE ENGINEERING, NUCLEAR, PETROLEUM

Institution	Enrollments Fall 1961			Degrees 1960-61		
	B.S.	M.S.	Ph.D.	B.S.	M.S.	Ph.D.
MINING (Cont.)						
Illinois	32	3	3	8	3	–
*Univ Ill	32	3	3	8	3	–
Kansas	–	–	–	1	–	–
Univ Kansas	–	–	–	1	–	–
Kentucky	21	2	–	–	1	–
*Univ Ky	21	2	–	–	1	–
Michigan	37	1	–	13	1	–
*Mich Col M & T	37	1	–	13	1	–
Minnesota	26	3	8	8	–	–
*Univ Minn	26	3	8	8	–	–
Missouri	54	16	4	19	8	–
*Mo Mines 20/	54	16	4	19	8	–
Montana	21	–	–	5	–	–
*Mont Mines	21	–	–	5	–	–
Nevada	29	4	–	6	–	–
*Univ Nev	29	4	–	6	–	–
New Mexico	3	–	–	6	–	–
N Mex Inst M & T	3	–	–	6	–	–
New York	1	5	2	1	2	–
*Columbia Univ 9/	1	5	2	1	2	–
North Dakota	5	–	–	8	–	–
*Univ N Dak	5	–	–	8	–	–
Ohio	17	2	–	4	–	–
*Ohio St Univ	17	2	–	4	–	–
Pennsylvania	35	5	1	28	2	2
*Lehigh Univ	9	–	–	7	–	–
*Pa St Univ	15	4	1	9	2	2
*Univ Pittsburgh	11	1	–	12	–	–
South Dakota	14	1	–	1	–	–
S Dak Mines	14	1	–	1	–	–
Texas	19	–	–	5	–	–
*Texas Western 20/	19	–	–	5	–	–
Utah	16	11	2	1	–	–
*Univ Utah	16	11	2	1	–	–
Virginia	18	6	–	9	5	–
*Va Poly Inst	18	6	–	9	5	–
Washington	20	3	–	9	–	–
*Univ Wash	10	3	–	6	–	–
*Wash St Univ	10	–	–	3	–	–
West Virginia	37	6	–	12	1	–
*W Va Univ	37	6	–	12	1	–
Wisconsin	85	27	14	21	1	–
*Univ Wisc	51	27	14	2	1	–
Wisc St Col & Inst Tech	34	–	–	19	–	–
NAVAL ARCHITECTURE AND MARINE ENGINEERING (TOTAL)	1318	116	11	318	61	4
California	130	14	8	42	3	2
Calif Maritime Acad	130	–	–	42	–	–
*Univ Calif (Berkeley) 1/	–	14	8	–	3	2
Maine	131	–	–	35	–	–
Maine Maritime Acad	131	–	–	35	–	–
Massachusetts	112	76	2	44	63	2
Mass Maritime Acad	97	–	–	30	–	–
*Mass Inst Tech	15	76	2	14	63	2
Michigan	125	15	1	26	11	–
*Univ Mich	125	15	1	26	11	–
New York	820	9	–	171	4	–
St Univ N Y (Maritime Col)	238	–	–	50	–	–
*Webb Inst Nav Arch	74	9	–	10	4	–
U S Mer Marine Acad	508	–	–	111	–	–
Pennsylvania	–	2	–	–	–	–
Univ Pittsburgh	–	2	–	–	–	–
NUCLEAR (TOTAL)	607	501	251	66	208	16
Arizona	–	20	4	–	6	–
Univ Ariz	–	20	4	–	6	–
California	3	33	34	–	–	–
US Naval PG Sch	3	–	–	–	–	–
*Univ Calif (Berkeley) 1/	–	33	34	–	–	–
District of Columbia	–	13	2	–	2	–
Catholic Univ	–	13	2	–	2	–

Institution	Enrollments Fall 1961			Degrees 1960-61		
	B.S.	M.S.	Ph.D.	B.S.	M.S.	Ph.D.
NUCLEAR (Cont.)						
Florida	9	12	6	–	4	–
Univ Fla	9	12	6	–	4	–
Georgia	–	–	–	–	5	–
Ga Inst Tech	–	–	–	–	5	–
Illinois	–	30	7	–	11	–
Univ Ill	–	30	7	–	11	–
Indiana	–	8	7	–	6	–
Purdue Univ	–	8	7	–	6	–
Iowa	–	21	17	–	14	3
Iowa St U Sci & Tech	–	21	17	–	14	3
Kansas	121	9	–	14	5	–
Kan St Univ A & AS	121	9	–	14	5	–
Maryland	–	–	–	–	1	–
Univ Maryland	–	–	–	–	1	–
Massachusetts	23	62	57	–	26	7
Harvard Univ	–	2	–	–	–	–
Lowell Tech Inst	23	–	–	–	–	–
Mass Inst Tech	–	60	57	–	26	7
Michigan	1	31	62	–	35	5
Mich Col M & T	1	2	–	–	1	–
Univ Mich	–	29	62	–	34	5
Mississippi	52	–	–	1	–	–
Miss St Univ	52	–	–	1	–	–
Missouri	72	7	1	–	1	–
*Mo Mines 21/	72	7	–	–	1	–
Wash Univ (St L)	–	–	1	–	–	–
Nevada	–	1	–	–	–	–
Univ Nev	–	1	–	–	–	–
New Jersey	–	2	–	–	–	–
Rutgers, The St Univ	–	2	–	–	–	–
New Mexico	–	31	6	–	–	–
Univ N Mex	–	31	6	–	–	–
New York	32	44	27	–	11	1
Columbia Univ	4	23	5	–	4	–
N Y Univ	–	7	2	–	5	–
Rensselaer Poly Inst	–	12	20	–	2	1
St Univ N Y (Maritime Col)	28	–	–	–	–	–
Univ Buffalo	–	2	–	–	–	–
North Carolina	184	15	9	40	6	–
N C St Col Ag & Engr	184	15	9	40	6	–
Ohio	–	46	–	–	19	–
A F Inst Tech	–	39	–	–	19	–
Univ Cinn	–	7	–	–	–	–
Oklahoma	–	2	–	–	2	–
Okla St Univ A & AS	–	2	–	–	–	–
Univ Okla	–	–	–	–	2	–
Pennsylvania	–	16	–	–	7	–
Carnegie Inst Tech	–	–	–	–	3	–
Pa St Univ	–	16	–	–	4	–
Tennessee	88	22	–	11	3	–
Univ Tenn	88	19	–	11	–	–
Vanderbilt Univ	–	3	–	–	3	–
Texas	–	20	8	–	15	–
Southern Meth Univ	–	12	–	–	14	–
Texas A & M	–	8	8	–	1	–
Virginia	–	17	2	–	13	–
Univ Va	–	17	2	–	11	–
Va Poly Inst	–	–	–	–	2	–
Washington	–	29	–	–	8	–
Univ Wash	–	29	–	–	8	–
West Virginia	–	2	–	–	4	–
W Va Univ	–	2	–	–	4	–
Wisconsin	22	8	2	–	4	–
Univ Wisc	22	8	2	–	4	–
PETROLEUM (TOTAL)	1340	242	31	455	82	3
California	37	51	4	11	20	–
*Stanford Univ	–	–	–	3	5	–
*Univ Calif (Berkeley) 1/	11	8	3	2	4	–
*Univ Sou Calif	26	43	1	6	11	–
Colorado	101	12	–	39	3	–
*Colo Mines	101	12	–	39	3	–
Kansas	21	7	–	9	1	–
*Univ Kansas	21	7	–	9	1	–

See footnotes at end of table.

Table D.—Engineering enrollments and degrees by level, curriculum, state and institution: 1961—Cont.

(– = zero)

PETROLEUM, SANITARY, TEXTILE, TRANSPORTATION, WELDING ENGINEERING, UNCLASSIFIED

Institution	Enrollments Fall 1961			Degrees 1960-61		
	B.S.	M.S.	Ph.D.	B.S.	M.S.	Ph.D.
PETROLEUM (Cont.)						
Louisiana	138	9	-	68	4	-
*La Poly Inst	25	6	-	16	-	-
*La St Univ & A & M Col	84	3	-	40	2	-
Univ S W La	29	-	-	12	2	-
Minnesota	3	-	-	-	-	-
Univ Minn 22/	3	-	-	-	-	-
Mississippi	7	-	-	-	-	-
Miss St Univ	7	-	-	-	-	-
Missouri	47	3	-	17	1	-
*Mo Mines 22/	47	3	-	17	1	-
Montana	20	1	-	5	-	-
Mont Mines	20	1	-	5	-	-
New Mexico	18	-	-	9	-	-
N Mex Inst M & T	18	-	-	9	-	-
Ohio	5	-	-	9	-	-
*Ohio St Univ	5	-	-	9	-	-
Oklahoma	404	96	-	100	13	-
*Univ Okla	109	26	-	69	5	-
*Univ Tulsa 23/	295	70	-	31	8	-
Pennsylvania	50	14	5	17	13	-
*Pa St Univ 24/	28	14	5	9	12	-
*Univ Pittsburgh	22	-	-	8	1	-
Texas	380	46	22	164	27	3
*Texas A & M 9/	74	10	6	22	10	2
Texas Col A & I	77	-	-	29	2	-
*Texas Tech Col	55	-	-	35	-	-
Texas Western Col	1	-	-	-	-	-
*Univ Houston	76	7	-	9	-	-
*Univ Texas	97	29	16	69	15	1
West Virginia	18	2	-	-	-	-
*W Va Univ 22/	18	2	-	-	-	-
Wyoming	37	1	-	7	-	-
Univ Wyo	37	1	-	7	-	-
SANITARY (TOTAL)	12	156	55	5	74	12
California	-	13	15	-	12	5
*Univ Calif (Berkeley) 1/	-	13	15	-	12	5
Georgia	-	-	-	-	2	-
Ga Inst Tech	-	-	-	-	2	-
Illinois	-	10	3	-	2	-
Ill Inst Tech	-	-	-	-	1	-
*Univ Ill	-	10	3	-	1	-
Iowa	-	5	3	-	5	-
*St Univ Iowa 8/	-	5	3	-	5	-
Maryland	-	11	8	-	8	2
Johns Hopkins Univ	-	11	8	-	8	2
Massachusetts	-	21	10	-	14	4
*Harvard Univ 9/	-	10	6	-	4	1
Mass Inst Tech	-	11	4	-	10	2
Radcliffe Col	-	-	-	-	-	1
Michigan	-	20	-	-	1	-
Mich St Univ A & AS	-	-	-	-	1	-
Univ Mich	-	20	-	-	-	-
Minnesota	-	8	3	-	-	-
*Univ Minn 8/	-	8	3	-	-	-
Missouri	-	6	6	-	3	1
Mo Univ	-	-	-	-	2	-
Wash Univ (St L)	-	6	6	-	1	1
New Jersey	2	1	-	-	-	-
*Rutgers, The St Univ	2	1	-	-	-	-
New York	-	-	-	-	1	-
Syracuse Univ	-	-	-	-	1	-
North Carolina	-	14	3	-	5	-
Univ N C	-	14	3	-	5	-
Ohio	-	18	4	-	3	-
Case Inst	-	10	4	-	3	-
Univ Cinn	-	8	-	-	-	-
Oklahoma	5	22	-	1	13	-
Okla St Univ A & AS	-	-	-	-	1	-
Univ Okla	5	22	-	1	12	-
Oregon	-	-	-	-	2	-
Oregon St Univ	-	-	-	-	2	-
Pennsylvania	5	1	-	4	-	-
*Pa St Univ	5	1	-	4	-	-
Texas	-	6	-	-	2	-
*Univ Texas 8/	-	6	-	-	2	-

Institution	Enrollments Fall 1961			Degrees 1960-61		
	B.S.	M.S.	Ph.D.	B.S.	M.S.	Ph.D.
SANITARY (Cont.)						
Virginia	-	-	-	-	1	-
Va Poly Inst	-	-	-	-	1	-
TEXTILE (TOTAL)	229	33	2	54	19	-
Alabama	-	-	-	4	-	-
Auburn Univ	-	-	-	4	-	-
Georgia	43	1	-	6	1	-
*Ga Inst Tech 3/	43	1	-	6	1	-
Massachusetts	75	12	2	11	12	-
Bradford-Durfee Col	1	-	-	1	-	-
*Lowell Tech Inst	73	8	-	9	7	-
Mass Inst Tech	-	4	2	-	5	-
New Bedford Inst Tech	1	-	-	1	-	-
Pennsylvania	104	-	-	27	-	-
Phila Col Text & Sci	104	-	-	27	-	-
South Carolina	-	-	-	4	-	-
Clemson Agr Col	-	-	-	4	-	-
Texas	7	-	-	2	-	-
*Texas Tech Col	7	-	-	2	-	-
Virginia	-	20	-	-	6	-
Inst of Text Tech	-	20	-	-	6	-
TRANSPORTATION (TOTAL)	-	13	11	-	16	-
California	-	13	11	-	16	-
*Univ Calif (Berkeley) 1/	-	13	11	-	16	-
WELDING ENGR (TOTAL)	72	8	-	15	1	-
Ohio	39	8	-	7	1	-
*Ohio St Univ	39	8	-	7	1	-
Texas	33	-	-	8	-	-
Le Tourneau Tech	33	-	-	8	-	-
UNCLASSIFIED (TOTAL)	30899	775	18	12	22	7
Alabama	524	187	-	-	-	-
Tuskegee Inst	1	1	-	-	-	-
Univ Ala	523	186	-	-	-	-
Alaska	-	6	-	-	-	-
Univ Alaska	-	6	-	-	-	-
Arizona	64	-	-	-	-	-
Univ Ariz	64	-	-	-	-	-
Arkansas	4	-	-	-	-	-
Univ Ark	4	-	-	-	-	-
California	2204	17	-	10	2	-
Chico St Col	14	-	-	-	-	-
Long Beach St Col	277	-	-	-	-	-
L A St Col AA & S	128	-	-	-	-	-
Northrop Inst Tech	48	-	-	-	-	-
Sacramento St Col	11	-	-	-	-	-
San Jose St Col	761	-	-	-	-	-
U S Nav PG Sch	-	-	-	10	-	-
Univ Calif (Berkeley)	947	-	-	-	2	-
Univ of Pacific	8	-	-	-	-	-
Univ of Santa Clara	10	-	-	-	-	-
Univ Sou Calif	-	17	-	-	-	-
Colorado	589	78	10	-	-	-
Colo St Univ	238	-	-	-	-	-
Univ Colo	327	78	10	-	-	-
Univ Denver	24	-	-	-	-	-
Connecticut	1059	42	6	-	-	-
Hillyer Col	175	-	-	-	-	-
Univ Bridgeport	92	42	-	-	-	-
Univ Conn	792	-	-	-	-	-
Yale Univ	-	-	6	-	-	-
Delaware	33	-	-	-	-	-
Univ Del	33	-	-	-	-	-
District of Columbia	4	67	-	-	-	-
Catholic Univ	4	6	-	-	-	-
Geo Wash Univ	-	61	-	-	-	-
Florida	321	-	-	-	-	-
Fla St Univ	93	-	-	-	-	-
Univ Fla	228	-	-	-	-	-
Hawaii	83	-	-	-	-	-
Univ Hawaii	83	-	-	-	-	-

See footnotes at end of table.

Table D.—Engineering enrollments and degrees by level, curriculum, state and institution: 1961--Cont.

(– = zero)

UNCLASSIFIED, OTHER

Institution	Enrollments Fall 1961			Degrees 1960-61		
	B.S.	M.S.	Ph.D.	B.S.	M.S.	Ph.D.
UNCLASSIFIED (Cont.)						
Illinois	450	–	–	–	–	–
Bradley Univ	38	–	–	–	–	–
Ill Inst Tech	394	–	–	–	–	–
Northwestern Univ	18	–	–	–	–	–
Indiana	3628	7	–	–	–	–
Evansville Col	131	–	–	–	–	–
Purdue Univ	3255	7	–	–	–	–
Rose Poly Inst	176	–	–	–	–	–
Univ Notre Dame	11	–	–	–	–	–
Valparaiso Univ	55	–	–	–	–	–
Iowa	13	–	–	–	–	–
Iowa St Univ Sci & Tech	13	–	–	–	–	–
Kansas	428	–	–	–	–	–
Kan St Univ A & AS	2	–	–	–	–	–
Univ Kansas	235	–	–	–	–	–
Univ Wichita	191	–	–	–	–	–
Kentucky	578	1	–	–	–	–
Univ Ky	246	–	–	–	–	–
Univ Louisville	332	1	–	–	–	–
Louisiana	204	–	–	–	–	–
La Poly Inst	55	–	–	–	–	–
Sou Univ & A & M Col	14	–	–	–	–	–
Tulane Univ	105	–	–	–	–	–
Univ S W La	30	–	–	–	–	–
Maine	314	–	–	–	–	–
Univ Maine	314	–	–	–	–	–
Maryland	316	–	–	–	–	–
Johns Hopkins Univ	37	–	–	–	–	–
Univ Maryland	279	–	–	–	–	–
Massachusetts	1914	58	–	–	16	–
Boston Univ	54	–	–	–	–	–
Harvard Univ	109	–	–	–	–	–
Mass Inst Tech	–	–	–	–	16	–
Northeastern Univ	858	–	–	–	–	–
Tufts Univ	271	–	–	–	–	–
Univ Mass	299	–	–	–	–	–
Worcester Poly Inst	323	58	–	–	–	–
Michigan	1319	–	–	–	–	–
Lawrence Inst Tech	36	–	–	–	–	–
Mich St Univ A & AS	318	–	–	–	–	–
Univ Detroit	234	–	–	–	–	–
Univ Mich	655	–	–	–	–	–
Wayne St Univ	76	–	–	–	–	–
Minnesota	76	–	–	–	–	–
Univ Minn	76	–	–	–	–	–
Mississippi	55	–	–	–	–	–
Univ Miss	55	–	–	–	–	–
Missouri	107	47	–	–	–	–
St Louis Univ	50	30	–	–	–	–
Mo Mines	48	–	–	–	–	–
Wash Univ (St L)	9	17	–	–	–	–
Montana	184	–	–	–	–	–
Mont Mines	156	–	–	–	–	–
Mont St Col	28	–	–	–	–	–
Nebraska	751	–	–	–	–	–
Mun Univ Omaha	333	–	–	–	–	–
Univ Nebr	418	–	–	–	–	–
New Jersey	810	–	–	–	–	–
Fairleigh-Dickinson Univ	344	–	–	–	–	–
Newark Col Engr	21	–	–	–	–	–
Princeton Univ	6	–	–	–	–	–
Rutgers, The St Univ	439	–	–	–	–	–
New Mexico	653	–	–	–	–	–
N Mex Inst M & T	141	–	–	–	–	–
N Mex St Univ	177	–	–	–	–	–
Univ N Mex	335	–	–	–	–	–
New York	2777	70	2	–	2	–
City Col of N Y	880	–	–	–	–	–
Columbia Univ	243	–	–	–	2	–
Cornell Univ	500	–	–	–	–	–
Manhattan Col	6	–	–	–	–	–
N Y Univ	34	–	–	–	–	–
Poly Inst Brooklyn	59	–	–	–	–	–
Pratt Inst	44	–	–	–	–	–
Rensselaer Poly Inst	123	–	–	–	–	–
UNCLASSIFIED (Cont.)						
New York (Cont.)						
Syracuse Univ	31	–	–	–	–	–
Union Col & Univ	1	–	–	–	–	–
Univ Buffalo	856	70	2	–	–	–
North Carolina	137	–	–	–	–	–
Duke Univ	137	–	–	–	–	–
North Dakota	165	–	–	–	–	–
Univ N Dak	165	–	–	–	–	–
Ohio	2435	15	–	2	–	–
Fenn Col	478	–	–	–	–	–
Ohio St Univ	785	–	–	–	–	–
Ohio Univ	396	–	–	–	–	–
Univ Akron	283	–	–	–	–	–
Univ Cinn	88	–	–	2	–	–
Univ Dayton	–	3	–	–	–	–
Univ Toledo	80	12	–	–	–	–
Youngstown Univ	325	–	–	–	–	–
Oklahoma	745	9	–	–	–	7
Okla St Univ A & AS	444	–	–	–	–	7
Univ Okla	301	9	–	–	–	–
Oregon	530	–	–	–	–	–
Oregon St Univ	530	–	–	–	–	–
Pennsylvania	1873	93	–	–	1	–
Bucknell Univ	1	–	–	–	–	–
Drexel Inst Tech	–	93	–	–	1	–
Geneva Col	93	–	–	–	–	–
Grove City Col	5	–	–	–	–	–
Lafayette Col	49	–	–	–	–	–
Lehigh Univ	433	–	–	–	–	–
Pa Mil Col	88	–	–	–	–	–
Pa St Univ	850	–	–	–	–	–
Swarthmore Col	48	–	–	–	–	–
Univ Pittsburgh	3	–	–	–	–	–
Villanova Univ	303	–	–	–	–	–
Rhode Island	427	11	–	–	–	–
Brown Univ	189	11	–	–	–	–
Univ R I	238	–	–	–	–	–
South Carolina	61	–	–	–	–	–
Clemson Agr Col	61	–	–	–	–	–
South Dakota	652	–	–	–	–	–
S Dak Mines	267	–	–	–	–	–
S Dak St Col A & MA	385	–	–	–	–	–
Tennessee	387	20	–	–	–	–
Christian Bros Col	24	–	–	–	–	–
Univ Chattanooga	75	–	–	–	–	–
Univ Tenn	288	20	–	–	–	–
Texas	972	1	–	–	–	–
Lamar St Col Tech	161	–	–	–	–	–
Prairie View A & M	8	–	–	–	–	–
Rice Univ	385	–	–	–	–	–
Southern Meth Univ	8	1	–	–	–	–
Texas A & M	274	–	–	–	–	–
Texas Tech Col	38	–	–	–	–	–
Texas Western Col	16	–	–	–	–	–
Univ Texas	82	–	–	–	–	–
Utah	168	–	–	–	–	–
Univ Utah	168	–	–	–	–	–
Vermont	10	–	–	–	–	–
Univ Vermont	10	–	–	–	–	–
Virginia	62	–	–	–	–	–
Va Poly Inst	62	–	–	–	–	–
Washington	869	41	–	–	–	–
Seattle Univ	15	41	–	–	–	–
Univ Wash	854	–	–	–	–	–
West Virginia	167	–	–	–	–	–
W Va Inst Tech	166	–	–	–	–	–
W Va Univ	1	–	–	–	–	–
Wisconsin	482	5	–	–	1	–
Univ Wisc	419	5	–	–	1	–
Wisc St Col Inst Tech	63	–	–	–	–	–
Puerto Rico	1295	–	–	–	–	–
Univ P R	1295	–	–	–	–	–
OTHER (TOTAL)	3970	603	175	441	169	13
Arizona	50	11	–	3	–	–
Ariz St Univ	–	–	–	3	–	–

See footnotes at end of table.

Table D.—Engineering enrollments and degrees by level, curriculum, state and institution: 1961--Cont.

(– = zero)

OTHER

Institution	Enrollments Fall 1961			Degrees 1960-61		
	B.S.	M.S.	Ph.D.	B.S.	M.S.	Ph.D.
)						
.	50	11	-	-	-	-
	2254	10	4	216	3	-
	-	10	4	-	-	-
	(1072)	(-)	(-)	(116)	(-)	(-)
	498	-	-	30	-	-
	574	-	-	86	-	-
	52	-	-	-	-	-
	86	-	-	49	-	-
Loy .	13	-	-	-	-	-
Northro, .	448	-	-	50	-	-
Univ Calif (Berkeley)	3	-	-	1	3	-
Colorado	301	71	5	15	11	-
Colo Mines	151	9	3	-	-	-
Colo St Univ	-	2	-	-	1	-
Univ Colo	150	60	2	15	10	-
Connecticut	105	-	-	-	-	-
Univ Bridgeport	105	-	-	-	-	-
Delaware	-	3	16	1	-	-
Univ Del	-	3	16	1	-	-
District of Columbia .	-	3	3	-	-	-
Catholic Univ	-	3	3	-	-	-
Illinois	83	11	7	14	4	-
Ill Inst Tech	83	11	7	14	4	-
Indiana	244	169	-	1	14	-
Ind Tech Col	244	-	-	-	-	-
Purdue Univ	-	169	-	1	14	-
Iowa	8	-	-	-	-	-
Iowa St Univ Sci & Tech	8	-	-	-	-	-
Kansas	-	-	6	-	-	-
Kan St Univ A & AS .	-	-	6	-	-	-
Louisiana	3	-	-	2	-	-
La St Univ & A & M Col	3	-	-	2	-	-
Maine	4	1	-	6	5	-
Univ Maine	4	1	-	6	5	-
Maryland	59	-	-	-	-	-
Univ Maryland	59	-	-	-	-	-
Massachusetts	174	18	33	46	23	6
Boston Univ	174	-	-	26	-	-
Harvard Univ	-	15	32	-	11	6
Lowell Tech Inst ...	-	-	-	20	4	-
Northeastern Univ ..	-	-	-	-	7	-
Radcliffe Col	-	3	1	-	1	-
Michigan	102	64	26	61	32	1
Chrysler Inst Engr .	-	20	-	-	-	-
Mich St Univ A & AS .	-	-	18	-	-	-

Institution	Enrollments Fall 1961			Degrees 1960-61		
	B.S.	M.S.	Ph.D.	B.S.	M.S.	Ph.D.
OTHER (Cont.)						
Michigan (Cont.)						
Univ Mich	101	44	8	60	32	1
Wayne St Univ	1	-	-	1	-	-
Minnesota	100	63	39	8	-	-
Univ Minn	100	63	39	8	-	-
Missouri	-	50	-	-	6	-
St Louis Univ	-	50	-	-	6	-
Montana	2	3	-	-	-	-
Mont Mines	2	3	-	-	-	-
New Jersey	304	8	-	7	8	-
Monmouth Col	294	-	-	6	-	-
Princeton Univ ...	-	8	-	-	8	-
Rutgers, The St Univ	10	-	-	1	-	-
New York	4	3	4	3	10	3
Columbia Univ	4	3	4	-	1	3
N Y Univ	-	-	-	3	6	-
Rensselaer Poly Inst	-	-	-	-	3	-
North Carolina	31	-	-	7	-	-
N C Ag & Tech Col .	30	-	-	1	-	-
N C St Col Ag & Engr	1	-	-	6	-	-
Ohio	-	66	5	-	23	-
A F Inst Tech	-	47	-	-	19	-
Case Inst	-	16	5	-	4	-
Univ Cinn	-	3	-	-	-	-
Oklahoma	51	-	-	8	-	-
Okla City Univ ...	51	-	-	8	-	-
Pennsylvania	10	9	5	7	14	2
Drexel Inst Tech .	-	-		-	9	-
Pa St Univ.....	10	9	5	7	4	2
Univ Pa	-	-	-	-	1	-
Rhode Island	42	19	22	20	10	-
Brown Univ	-	19	22	-	10	-
R I Sch Design ...	7	-	-	12	-	-
Univ R I	35	-	-	8	-	-
Utah	39	7	-	11	-	1
Univ Utah	3	7	-	3	-	1
Utah St Univ A & AS	36	-	-	7	-	-
Westminster Col ..	-	-	-	1	-	-
Virginia	-	14	-	4	5	-
Hampton Inst	-	-	-	4	-	-
Va Poly Inst	-	14	-	-	5	-
Washington	-	-	-	-	1	-
Wash St Univ	-	-	-	-	1	-
Wisconsin	-	-	-	1	-	-
Univ Wisc	-	-	-	1	-	-

* Undergraduate curriculum accredited by the Engineer's Council for Professional Development.

1/ Five-year curriculum terminating with the Master's degree.

2/ Option as part of mechanical engineering (undergraduate).

3/ Accrediting applies to both the cooperative and regular curricula.

4/ Accrediting applies to astronautical also.

5/ Accrediting applies to day and evening curricula.

6/ Accrediting applies to the cooperating curriculum only.

7/ Includes option in Aero-Space.

8/ Option as part of civil engineering (undergraduate).

9/ Accrediting applies to the 4-year and 5-year curricula leading to the Bachelor of Science degree.

10/ Accrediting applies to evening curricula only.

11/ Includes option in Hydraulics.

12/ Includes option in electronics.

13/ Includes options in communications and power.

14/ Enrollments and degrees under this category at UCLA and at Stevens Institute of Technology are in the separately accredited curriculum of "Engineering" (as distinguished from "General Engineering").

15/ Includes administrative engineering, management engineering, etc. Schools starred are accredited for industrial engineering only except as footnoted.

16/ Administrative engineering or management engineering.

17/ Includes option in Nuclear.

18/ Includes option in mineral dressing.

19/ Includes option in physical metallurgy.

20/ Includes option in mining geology.

21/ Option as part of metallurgical engineering (undergraduate).

22/ Option as part of mining engineering (undergraduate).

23/ Includes options in petroleum production and petroleum refining.

24/ Includes natural gas.

Table E.--Undergraduate engineering enrollments of part-time and evening students by State and institution: 1961

(These students are distributed for the Nation, by curriculum in Cols. 12 and 13 of table A, and are included in institutional totals in Col. 1 of tables C & D)

(- = Zero)

Institution	Part-time day students	Evening students
GRAND TOTAL	4,134	29,016
ALABAMA (TOTAL)	1	934
Auburn Univ	1	-
Univ Alabama	-	934
ALASKA (TOTAL)	9	-
Univ Alaska	9	
ARKANSAS (TOTAL)	9	-
Univ Arkansas	9	-
CALIFORNIA (TOTAL)	337	1,169
Calif St Poly	(16)	(-)
Kellog V Campus	-	-
San Luis Ob Campus	16	-
Chico St Col	21	-
Elect. Tech Inst	7	186
Fresno St Col	8	-
Heald Engr Col	48	253
Long Beach St Col	55	168
L A St Col of AA & S	36	-
Northrop Inst Tech	-	301
Univ of Pacific	7	-
Univ Santa Clara	8	-
Univ Sou Calif	131	261
COLORADO (TOTAL)	23	1,214
Univ Colorado	-	1,209
Univ Denver	23	5
CONNECTICUT (TOTAL)	-	1,213
Hillyer Col	-	808
New Haven Col	-	182
Univ Bridgeport	-	223
DELAWARE (TOTAL)	3	-
Univ Delaware	3	-
DISTRICT OF COLUMBIA (TOTAL)	329	-
Catholic Univ	17	-
Geo Wash Univ	312	-
FLORIDA (TOTAL)	15	312
Univ Miami	15	312
GEORGIA (TOTAL)	8	-
Ga Inst Tech	8	-
HAWAII (TOTAL)	-	83
Univ Hawaii	-	83
ILLINOIS (TOTAL)	29	2,410
Aero Space Inst	-	7
Bradley Univ	-	69
Ill Inst Tech	-	2,305
Millikin Univ	6	29
Univ Illinois	23	
INDIANA (TOTAL)	18	80
Evansville Col	-	80
Rose Poly Inst	4	-
Valparaiso	14	-
KANSAS (TOTAL)	157	149
Univ Kansas	7	-
Univ Wichita	150	149
KENTUCKY (TOTAL)	78	8
Univ Kentucky	67	8
Univ Louisville	11	-
LOUISIANA (TOTAL)	5	6
La Poly Inst	2	-
McNeese St Col	1	6
Tulane Univ	2	-
MAINE (TOTAL)	22	-
Univ Maine	22	-
MARYLAND (TOTAL)	69	1,106
Johns Hopkins Univ	3	1,106
Univ Maryland	66	-
MASSACHUSETTS (TOTAL)	125	1,198
Boston Univ	24	172
Lowell Tech	5	-
Merrimack Col	-	235
Northeastern Univ	-	174
Univ Mass	92	-
Western New England Col	4	617
MICHIGAN (TOTAL)	870	1,505
Detroit Inst Tech	256	-
Lawrence Inst Tech	-	916
Mich Col M & T	4	-
Mich St Univ A & AS	5	5
Univ Detroit	-	584
Univ Michigan	87	-
Wayne St Univ	518	-
MISSISSIPPI (TOTAL)	19	-
Miss St Univ	15	-
Univ Mississippi	4	-
MISSOURI (TOTAL)	34	55
St Louis Univ	24	3
Univ Kansas City	10	52
NEBRASKA (TOTAL)	47	227
Mun Univ Omaha	47	227
NEW JERSEY (TOTAL)	37	3,375
Fairleigh Dickinson Univ	-	1,956
Monmouth Col	19	143
Newark Col Engr	-	1,276
Rutgers, The St Univ	3	-
Stevens Inst Tech	15	-
NEW MEXICO (TOTAL)	275	-
N Mex St Univ	275	-
NEW YORK (TOTAL)	61	4,149
Alfred Univ	4	-
City Col N Y	-	1,009
Clarkson Col	1	-
Cooper Union	13	346
Manhattan Col	20	-
N Y Univ	-	488
Poly Inst Brooklyn	-	1,316
Pratt Inst	2	44
Rensselaer Poly Inst	13	45
Union Col	-	73
Univ Buffalo	6	828
Univ Rochester	2	-

Table E.--Undergraduate engineering enrollments of part-time and evening students by State and institution: 1961--Continued.

(These students are distributed for the Nation, by curriculum in Cols. 12 and 13 of table A, and are included in institutional totals in Col. 1 of tables C & D)

(- = Zero)

Institution	Part-time day students	Evening students
NORTH CAROLINA (TOTAL)	7	-
Duke Univ.	2	-
N C Agr & Tech.	5	-
NORTH DAKOTA (TOTAL)	8	-
N Dak Agr Col.	8	-
OHIO (TOTAL)	598	2,740
Case Inst.	16	-
Fenn Col.	-	691
Ohio No Univ.	12	-
Ohio St Univ.	44	243
Univ Cinn.	-	1,401
Univ Dayton.	22	153
Univ Toledo.	69	252
Univ Youngstown.	435	-
OKLAHOMA (TOTAL)	46	166
Okla City Univ.	5	27
Univ Okla.	28	-
Univ Tulsa.	13	139
PENNSYLVANIA (TOTAL)	182	4,188
Carnegie Inst.	2	778
Drexel Inst.	-	2,131
Gannon Col.	12	47
Geneva Col.	-	153
Pa Mil Col.	-	348
Pa St Univ.	34	-
Univ Pa.	6	-
Univ Pittsburgh.	128	452
Villanova Univ.	-	279
RHODE ISLAND (TOTAL)	15	-
Univ R I.	15	-
TENNESSEE (TOTAL)	42	121
Christian Bro's Col.	24	-
Tenn Poly Inst.	4	-
TENNESSEE (Cont.)		
Univ Chattanooga.	14	104
Univ Tennessee.	-	17
TEXAS (TOTAL)	273	1,456
Arlington St Col.	-	614
Lamar St Col Tech.	9	160
Southern Meth Univ.	5	-
Texas A & M.	24	-
Texas Tech Col.	64	1
Texas Western Col.	-	135
Univ Houston.	171	546
UTAH (TOTAL)	5	96
Brigham Young Univ.	-	1
Univ Utah.	4	95
Westminster Col.	1	-
VIRGINIA (TOTAL)	22	-
Univ Va.	10	-
Va Poly Inst.	12	-
WASHINGTON (TOTAL)	3	116
Gonzaga Univ.	3	-
Seattle Univ.	-	116
WEST VIRGINIA (TOTAL)	32	-
W Va Inst Tech.	16	-
W Va Univ.	16	-
WISCONSIN (TOTAL)	255	940
Marquette Univ.	-	429
Milwaukee Sch Engr.	122	385
Univ Wisconsin.	133	126
PUERTO RICO (TOTAL)	66	-
Univ Puerto Rico.	66	-

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Related Publications

Advanced Report on Engineering Enrollments and Degrees: 1961 (OE–54004–61), by Wayne E. Tolliver, Henry Armsby, and Leah W. Ramsey. U.S. Department of Health, Education, and Welfare, Office of Education. Washington: U.S. Government Printing Office, 1962. 4 p.

A summary of data collected in the 13th annual survey of engineering enrollments and degrees conducted under the joint auspicies of the U.S. Office of Education and the American Society of Engineering Education.

Bachelor's Degrees in Science and Mathematics Expected for 1961–62 and Junior-Year Enrollments in Science, Mathematics, and Foreign Languages (OE–54021–62), by Wayne E. Tolliver. U.S. Department of Health, Education, and Welfare, Office of Education. 6 p.

Provides short-term projections of bachelor's degrees to be conferred in the biological, and physical sciences and mathematics.

Earned Degrees Conferred 1959–60-Bachelor's and Higher Degrees (Circular No. 687), by Wayne E. Tolliver. U.S. Department of Health, Education, and Welfare, Office of Education. Washington: U.S. Government Printing Office, 1962. 207 p.

A report on the 13th annual survey of earned degrees conducted by the U.S. Office of Education, showing degrees granted in 160 fields, by institution, field, and level for men and women separately.

Engineering Enrollments and Degrees in ECPD-Accredited Institutions: 1961, by Wayne E. Tolliver and Henry H. Armsby. Urbana, Ill.: The American Society for Engineering Education Journal of Engineering Education, 1201 West California St., Yearbook Issue, 1962. 17 p.

Provides institutional and national data on engineering enrollments and degrees for institutions in which one or more engineering curriculums are accredited by the Engineer's Council for Professional Development.

Enrollment for Advanced Degrees: Fall 1960 (Circular No. 674), by Wayne E. Tolliver. U.S. Department of Health, Education, and Welfare, Office of Education. Washington: U.S. Government Printing Office, 1962. (In preparation.)

Provides institutional and national data on full-time and part-time enrollment for advanced degrees by field of study. Analysis is made as to the number of such students in their first year and intermediate years of study and the number in their terminal year of study for the doctorate.

Opening (Fall) Enrollment in Higher Education, 1960: Analytic Report (Circular No. 652), by Edith M. Huddleston. U.S. Department of Health, Education, and Welfare, Office of Education. Washington: U.S. Government Printing Office, 1961. 43 p.

Provides an extensive analysis of trends in opening enrollment, by sex, curricular organization, type of institution, and type of control.

Organized Occupational Curriculums in Higher Education, Enrollments and Graduates, 1958 (Circular No. 632), by Ken A. Brunner and D. Grant Morrison. U.S. Department of Health, Education, and Welfare, Office of Education. Washington: U.S. Government Printing Office, 1961. 250 p.

This is the third in the series of annual surveys of enrollments and graduates in organized occupational curriculums of less than four years at institutions of higher education in the United States. Data are presented for 44 engineering-related curriculums and 53 nonengineering-related curriculums.

Transfers to Schools or Colleges of Engineering, 1951, 1952, 1953, 1959, and 1960 (OE–54005–61), by Henry H. Armsby. U.S. Department of Health, Education, and Welfare, Office of Education. 8 p.

Presents the results of the fifth study of transfers to schools or colleges of engineering from one institution to another and from nonengineering curriculums to engineering curriculums.

Trends in Engineering Education: 1949 to 1959 (Circular No. 635), by Henry H. Armsby. U.S. Department of Health, Education, and Welfare, Office of Education. Washington: U.S. Government Printing Office, 1961. 67 p.

Sums up some of the important changes in engineering education which have taken place during the last 10 years, and forecasts changes for the next 2 years.

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